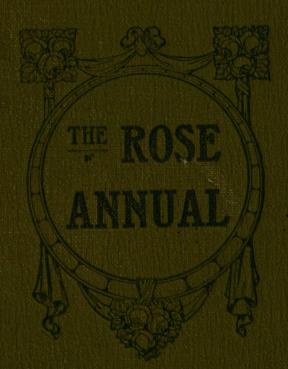


NATIONAL ROSE SOCIETY.



1915.



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Notices to Members for 1915.

Subscriptions of New Members. Those members who joined the Society on or after July 7th, 1914, and have already paid a subscription, are exempt from further payment until May 1st, 1916.

New Members of the current year. Subscriptions paid by new members on or after June 29th next entitle to all the publications and other privileges of membership until May 18t, 1917.

Resignations. Any member wishing to resign must give notice to the Hon. Secretaries and return his Admission Tickets on or before June 1st, after which date he will remain liable for his subscription.

The Exhibitions. Three Shows will be held. The Spring Show will take place in the Royal Horticultural Hall, Vincent Square, on Friday, April 16th; the Metropolitan Exhibition, in the Royal Botanic Gardens, Regent's Park, on Tuesday, June 29th; and the Autumn Rose Show, in the Royal Horticultural Hall, Vincent Square, Westminster, on Thursday, September 16th.

Admission Tickets. Admission Tickets for the Spring Show are enclosed with this publication. Tickets for the Royal Botanic and Autumn Shows will be sent early in May.

Extra Tickets. Members can purchase extra Tickets for their friends for the Royal Botanic Show at the following reduced rates, viz., Five-Shilling Tickets for 3s. 6d., and Half-Crown Tickets for 1s. 6d., if application be made to the Hon. Secretaries, 25, Victoria Street, S.W., on or before June 26th.

Extra Copies of Publications. Members can purchase extra copies of the "Handbook on Pruning Roses," the "Official Catalogue of Roses" and the Rose Annual for 1915 for their friends, of the Hon. Secretaries, for 2s. 6d. a copy (post free).

H. R. DARLINGTON, COURTNEY PAGE, Hon. Secretaries.

MARCH, 1915.

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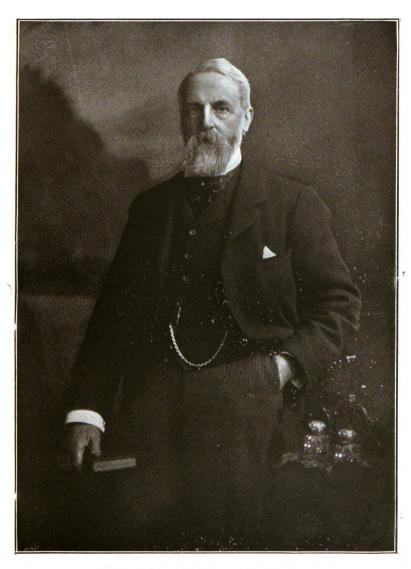
N.B.—Select your Rose Trees WHILST IN BLOOM.

NOTICE.

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CROYDON

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EDWARD MAWLEY, V.M.H., PRESIDENT.

THE

National Rose Society's

ROSE ANNUAL

For 1915.

Edited by H. R. DARLINGTON.

Under the direction of the Publications Committee.

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PREFACE.



N submitting the Rose Annual to the Members of the National Rose Society this year, the Editor asks for the indulgence of his readers on the ground of the short time—but little more than a month—that has been available for its preparation since his appointment as Editor.

These circumstances have prevented the collection of photographs to illustrate the subject matter in the way that he would have wished.

The whole of the articles for the Annual are contributed gratuitously, and the thanks of the Editor, and of the Members of the Society generally, are due to the authors for their readiness in preparing them, and the trouble they have taken in doing so.

The Editor cannot hold himself responsible for the opinions, or forms of expression of his contributors—of many he entirely approves, and there are some few he does not agree with or would wish to qualify—but he has judged it to be best to resist the temptation to comment in foot-notes.

The Editor's thanks are due to Mr. WETTERN for supervising the colour plates, to Mr. MAWLEY for correcting several of the proofs, and to Mr. COURTNEY PAGE for helping him with the illustrations and much other assistance and advice, and to Mr. Cook, the Assistant Secretary, for preparing the index.

ENVIRON.

DESIG! H. R. DARLINGTON.

Potters Bar, March, 1915.



Walshams Ltd:

Basket of Roses Presented by the National Rose Society to Her Majesty Queen Alexandra on St. George's Day, April 23, 1914



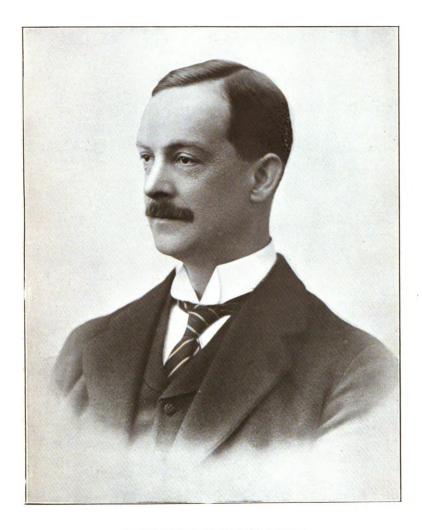
TABLE OF CONTENTS. ENVIRON. DESIGN LIBRARY

		PAGE
ı.	Verse from Mrs. E. B. Browning	10
2.	Roses in War Time. E. and M. Hockliffe	11
3.	Notes on How to Cut Roses. Mrs. H. R. Darlington	16
4.	The Lasting Qualities of Cut Roses. George Laing Paul	21
5.	Roses for Decoration. Mrs. C. C. Williamson	24
6.	Table Decoration with Roses. Mrs. Courtney Page	26
7.	New Species of Rosa. W. Dallimore	27
8.	Rugosa Roses. H. R. Darlington	31
9.	The Cultivation of Rose, "Mrs. Edward Mawley." Edward Mawley, V.M.H., President	48
ıo.	Rose Growing in Western Australia. J. C. Windsor	53
11.	Dates of Blooming. Walter Cowley	55 55
12.	The Great Frost of May, 1914. Gulliver Speight	58
13.	Experiences of an Amateur in 1914. G. O. Nicholson	59
14.	Symposium on Manuring Roses :-	39
•	O. G. Orpen, Dr. Charles Lamplough, F. Slaughter,	
	G. C. Sawday, W. Dallimore, Rev. J. B. Shackle, "Torbay,"	
	Richard Woosnam, Dr. A. H. Williams	62
15.	Municipal Rose Gardens. Walter Easlea, Herbert L. Wettern,	
,	E. F. Morgan	88
16.	Roses and Disease. G. M. Taylor	99
17.	Roses under Glass, the prevention of Mildew. E. J. Holland	102
18.	Black Spot and Mildew. Thomas N. Cook	105
19.	Rose Analysis, 1909-1914. Edward Mawley, V.M.H., President	110
20.	In Memoriam—George Gordon. F. W. Harvey	123
21.	Report of the Rose Conference at the White City	126
22.	Descriptions of New Roses	146
23.	The New Roses of 1914. H. E. Molyneux	153
24.	The National Rose Society. Edward Mawley, V.M.H., President	158
25.	Our Colour Photographs. H. L. Wettern	161
26.	Index	163

ILLUSTRATIONS.

COLOURED PLATES.

							PAGE
Bouquet of Roses, presented to (Queen Ale	xandı	a on S	t. Geo	rge's		
Day, 1914				••		Facing	6
Arch of American Pillar Roses	••	••				,,	62
Bowl of Madame E. Herriot			••			,,	110
Rose Walk at Sanderstead	••			••		,,	161
•							
	PLATE	s.					
Portrait of Mr. Edward Mawley,	V.M.H.,	Pres	ident	••		,,	4
" " " Mr. E. J. Holland, D	eputy-Pre	siden	t			,,	8
" " " Mr. George Paul, V.I	M.H., Vi	ce-Pre	sident			,,	16
,, ,, Dr. Charles Lamplou	gh, Vice-	Presid	lent			,,	20
Basket of Roses exhibited by Mr	s. Willia	mson				,,	24
Bowl of Roses, exhibited by Mrs	,,	26					
New Species of Rosa:-			_				
Rosa Arvensis						,,	28
Rosa Dupontü						,,	28
Rosa Moschata		• •	• •	• •		,,	30
Rosa Tomentosa				• •		,,	30
Rose, Mrs. Edward Mawley	••					,,	48
Bowl of New Zealand Roses, gr	own by	Mrs.	Arthur	Gillie	es,		
Rotorua, N.Z	••					,,	54
Portrait of the Rev. J. B. Shackl		,,	80				
Public Rose Garden, Westcliff-on	-Sea	• •				,,	88
Rose Arches, Public Gardens, W	estcliff-or	-Sea				,,	92
Diseases of Roses		••	••	• •		102 &	106
Portrait of the late George Gordon	, V.M.H.	, Vice	-Presid	ent		,,	126
Rose, Mme. d'Arblay, in the G	arden of	Mr.	Edware	d Mav	vley,		
Berkhamsted	• •		• •	••	• •	,,	128
Dawson Rose in the Gardens	of Mr.	E. K.	Butle	r, Jam	aica		
Plain, U.S.A	••	••	••	••		,,	144
Chart Showing Growth of the N	ational R	ose S	ociety			,,	160



E. J. HOLLAND, DEPUTY-PRESIDENT.

If Zeus chose us a king of the flowers in his mirth,

He would call to the Rose and would royally crown it;

For the Rose, ho, the Rose! is the grace of the earth,

Is the light of the plants that are growing upon it.

Mrs. Elizabeth Barrett Browning

[From Achilles Tatius (5th century) and attributed, but probably on insufficient grounds, to Sappho.]

Roses in War Time.

By E. and M. HOCKLIFFE.

What is the use of growing Roses when the great guns are booming on sea and land? Many of us must have asked ourselves this question as we picked the blossoms from our trees in the lovely days of August and September. Had we any right to take pleasure in our gardens? Was it even possible to do so while each day we read the story of the Great Retreat? The very beauty of the summer days, the richness and gaiety of the flower borders, the peace and splendour of the garden scene—ought we to find delight in these when so many of our countrymen were making the great sacrifice only a few miles away across the seas? At least all lovers of gardens must have said quietly to themselves, "If here is still delight for the eye, forget not those to whom our island peace is due."

And what is the answer to these questions? There are people who disapprove of football, golf, or the pursuit of any pleasure in time of war. They cannot grasp that to many minds the delight in pleasant and beautiful things is a help along the strenuous and often stony path of duty. They worship at the shrine of Duty alone, not remembering that she herself is but one aspect of the universal beauty of which there are as many forms as there are eyes to see them. There is danger in any too narrow worship. What is it that the Germans have done? They are like people gazing so intently through a microscope at one object that they can see nothing else. They have put duty to the State in their mental microscopes and have blinded themselves to every other aspect of beauty. Hence the destruction of

Louvain and Rheims, the ill-treatment of old men and women and children, and the endless examples of "frightfulness" that have sent a thrill of horror through the outraged world Germans came, it is said, in the course of their advance to the chateau of an elderly nobleman. Making perforce the best of a bad situation, he offered to entertain as well as he could the General and his staff. In return he implored their men to respect his hobby, his love of his beautiful home, his pictures, his garden and his lawns. They promised to do so and for ten days they kept their word. At the moment of departure he was in the act of thanking the General when a gardener burst in in tears—the troops had deliberately wrecked his garden and all that it contained. Had the Germans not lost their sense of beauty there would have been none of this vandalism, none of this brutality. If they had not forgotten to care for beautiful churches and pictures and books and gardens they would not have forgotten to care for women and girls and babes. Even the simple-hearted natives of Cairo understand that. Did they not the other day welcome our troops with showers of crimson Roses, scattering them in their path and twining wreaths round their necks and on their bayonets? There was no sense of incongruity in the hearts of these people, who desired to show by means of the most beautiful gift they could find their gratitude and loyalty to their British friends. It is a picture on which our thoughts dwell with pleasure. The fragrance and beauty of these Roses will be remembered when much else is forgotten, and what flower could have taken the place of the Rose?

But what of the gardens where Roses grow? The writers once visited a garden of a famous Rose grower. It was a wonder and yet a disillusionment. A Rose-garden—the very combination of the words suggests beauty. What could be more lovely? What is in fact more disappointing, viewed as a whole, than a Rose patch? The Rose-grower's Rose is indeed a beautiful thing. Pick the bloom and bring it indoors, and what can compare with it? But the Rose-grower's tree, to tell the truth, is stiff, ugly and inartistic.

Let us have the blooms if you like, but let us hide the trees. The long lines of stiff growing stalks, each crowned with one large bloom, are frankly ugly, and they should be put away in the paddock. For our gardens let us go for a lesson in grace and beauty to an English lane when the hedgerows are clothed in the garment of the new June Rose. In the growth of the tree lies half the mystery. Put Frau Karl Druschki upon the scrap heap-we have no use for stiff. military looking Roses with no scent and German names. Keep Bessie Brown for the exhibition tent if you think her worth it, or send her to Potsdam. But tend and cherish in a place of honour in your garden Gustave Regis-what more lovely than its just opened flower with the dew upon its petals on a sunny morning in June. It is beautiful always —the bud, the full bloom, even its wide opened petals. bowl of it should always be in the house, sweet, delicate, exquisite in form—a flower to live with, a flower for the bride to carry on her wedding day, a flower to strew the graves of those whom the gods have loved and who have died young. Its growth may be a little stiff and ungainly—what a pity that it has not the grace and freedom of Gruss an Teplitz-how hideous these names are-perhaps some of them will be changed now. All the single and half single Roses are charming, and they should be grown in the herbaceous border—they bloom freely, their colour is delicious, they make among the stronger growing herbaceous blooms a fine contrast of delicacy and refinement.

The writers have memories of a delightful old-fashioned garden where no new Roses were ever grown, where there was no special Rose bed, yet the bushes grew and flowered happily among masses of common herbaceous plants and annuals—all were grown together in generous soil and well cared for. There was nothing in the garden to attract the scientific gardener's eye, but the beauty of it was the delight of many an artist in days when the owner, an artist himself, was alive, and when his artist friends would often come to see him there in the closing years of a long life.

What a lovely thing is Marie van Houtte if you let her alone-from one good tree you may pick numbers of blooms, especially in autumn, the season when perhaps in some ways this Rose gives us of its best, and what a splendid figure it makes in the herbaceous border. So do Anna Olivier and La Tosca. They grow freely and splendidly if you will permit them to do so. They give you a constant wealth of blooms, and if you are not content with their size then you are not worthy to grow a Rose at all. Caroline Testout and Madame Abel Chatenay will do as finely if you will spare the knife. The cult of the large blossom spoils for us the beauty of the tree, and a Rose that will grow into a bush is in itself a charming thing with its pendant or upstanding blooms. If these are not quite so large as the three or four you will grow on a cut back plant, they are often quite as perfect and you will gather hundreds instead of tens. From quite a few trees of newer Roses treated in much the same way-cut down a little these, but not much—Edu Meyer, Richmond, Liberty, General McArthur, Dorothy Page-Roberts and the Lyon Rose, the writers last year gathered blooms almost uninterruptedly from July to November.

There are so many Roses now that bloom all through the autumn that if you have but a small garden you will be wise to buy no plants but those which possess this admirable quality. And here let us, who rarely see a Rose show, express our gratitude to the altogether excellent official catalogue issued by the Society. We have found it always a most trustworthy guide. A glance through it reminds us that we have forgotten that exquisite old favourite, Viscountess Folkestone—so well worth growing, not merely because she makes a fine bush, but because her flowers last so well. The fully-opened Rose is lovely, more beautiful in the freedom of its lines, more graceful perhaps then than at any moment of its flowering. This is a most useful quality. that some Roses have. Some are so short-lived, and those who have but a narrow plot of garden ground will be wise to plant trees whose blooms possess this power of lasting

without loss of colour. Roses that have this character might well be starred in the catalogue. Lastly, if you possess a retaining wall in your garden, plant wichuraianas at the top and let them hang their graceful festoons down the wall. They clothe it in due time with a wealth of beauty and make a delightful background to the border below. One more word of warning—beware of Juliet—the name suggests every quality that this Rose seems not to possess! It is fragrant, it is true, but the colour is coarse and crude—it would probably satisfy the sense of colour of a Hun.

And this conjecture brings us back to the thoughts which just now are never far away. It is a consolation that even in times like these we may still give the honour due to poets and artists and sculptors and growers of beautiful flowers and makers of gardens, even the humblest who try to keep alive the spirit of beauty. They are doing useful work—work not so essential maybe to our existence as that of our soldiers and sailors, but still work which should it cease would leave us as a nation poorer than before.



Notes on How to Cut Roses.

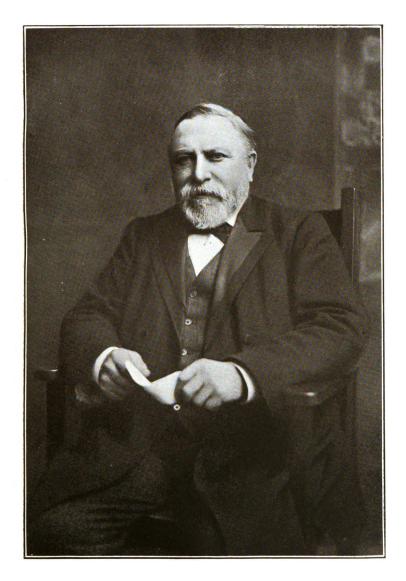
By Mrs. H. R. DARLINGTON.

If asked such a question as how to cut Roses the answer from some old-fashioned gardeners would be much the same as Mr. Punch's famous dictum regarding marriage, "Don't." Even now I am often told by some of my friends who have Rose growing husbands, "My husband never lets me cut any Roses." The husband surely would be much wiser, and save himself a great deal of trouble, if he would show his wife how to cut the Roses she wants for the house without spoiling the Rose plants.

A Rose ungathered is but a Rose,
Pluck it, lover, don't mind the thorn;
Tuck it away in your bosom close,
And drink its beauty from night to morn.

Nothing improves the appearance of a Rose garden more than the constant removal of the faded flowers, and to do this thoroughly in a garden of any size means a considerable amount of daily attention, and this should be given, and the flowers gathered by someone who understands the art of cutting Roses.

If the heads are just snicked off in the way usually adopted by the garden boy, useless and ugly bits of stalk are left to shrivel on the plant; on the other hand, some garden boys do their work so thoroughly that one may come home, perhaps after spending a day in town, to find one's garden denuded of Roses, the blossoms in their various stages of buds and open flowers having been all ruthlessly cut off and consigned to the wheelbarrow. And if it be true,



GEORGE PAUL, V.M.H., VICE-PRESIDENT, 1914.

as in this case it doubtless is, that the middle course is the safest, a very moderate experience of garden management will readily lead to the inference that it is the course which in matters of this kind the enterprising mind of youth will most reluctantly be induced to follow.

However, my subject is not so much how to cut off dead Roses as to cut the living ones for decoration without doing harm to the plants and without unduly curtailing the supply of blooms in the near future. It would probably not have occurred to me that suggestions on this matter would be useful to the members of the N.R.S. had I not been asked to write on the subject by a lady member who told me that a few words on the question in this year's Annual would be acceptable to many who, like herself, cut their own Roses

Many of those who love their flowers very dearly are inclined to be rather niggardly as regards cutting, and can only bring themselves to cut off the actual Rose on its short stalk, which, unless it is wanted to wear as a buttonhole flower, or to place in a small specimen vase, is really useless. In the early days of my Rose growing I remember being taken to task for cutting a Gloire de Dijon Rose in this fashion, and I was ruthlessly told that I did not understand the first principles of Rose cutting, if I was afraid to sacrifice the close growing buds. It so happened that my instructor was himself a surgeon, and it may be thought that in this case he was too little averse from the use of the knife. But in fact this is not so, and it is often the right course. With many Roses, Mme. Léon Pain for one instance, the buds on the cut stems add considerably to the decorative effect of the flower, while if left on the plant they would often produce but inferior flowers, in which case by leaving them you have fallen between two stools; you have lost the decorative effect you wanted and might have had, and the compensation you have received has been inadequate.

On the other hand there are many ladies who think of flowers merely as a decoration for their homes, and they cut

or tear down great branches of Roses without for a moment considering what result this will have on the bushes. If this is done without discrimination serious harm may possibly result.

Perhaps the first principle in Rose cutting, as in pruning, is always to cut just above an eye, and if possible the highest eve left on the plant should point outwards, for this helps to preserve the symmetry of the bush. Any stalk left above the last eve on the stem only dies and is quite useless to the plant. But where are we to select the eve? When a Rose fades in the ordinary course of nature, if there are no buds coming on and no seed has been set (and unless it is a variety in which the seeds are wanted for their decorative effect or for sowing, no seed should be allowed to set in the Rose garden), the stalk carrying the faded flower dies back to the first leaf, or, as is often the case, to the first set of leaves, and these leaves will continue to grow, but no fresh flower buds will be formed from their axils. After a time, however, the bud in the axil of the leaf next to these top leaves and lower down will shoot and produce a flower bud. There is therefore no object in leaving these top leaves immediately under the flower, and in fact by cutting them away down to the next effective bud we shall induce this bud to develop the more rapidly. will therefore give us the minimum amount to cut. how much more may we safely take? The answer to this depends on the relative vigour of the plant and the amount of other foliage it possesses. In a strong plant with plenty of other foliage like J. B. Clark, Frau Karl Druschki, or Hugh Dickson we may take perhaps a foot or more of stem. if we want it, without damaging the plant. On the other hand, if the amount of stem we should like to cut with the flower would seriously reduce the foliage left on the plant, then we must exercise caution. I remember on one occasion when badly off for flowers for a decorative exhibit, cutting nearly all the branches from a standard of Antoine Rivoire, and this gave the plant such a check that it never really recovered.

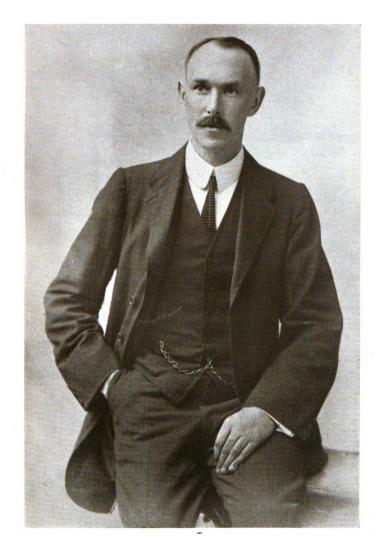
Again, it is very little use cutting back into the old stems. even when we want long sprays, for the blooms soon fade in water because the hard stems are unable to take up enough water to keep the blossoms fresh. It will therefore, as a rule, be among the vigorous Roses that we have pruned fairly hard in the spring that we shall seek for the long stems we want And this is as it should be. for decoration. The great unpruned bushes of Gustave Regis and Killarney look so lovely in the garden that we do not want to do more than cut away their faded flowers and flower stalks, leaving the wealth of fresh blooms untouched, but the bushes of Mrs. E. G. Hill and Mme. Leon Pain, of Pharisäer and Prince de Bulgarie that have been cut down in March send up such strong shoots, crowned with a group of flowers, that we are tempted to cut huge sprays for the decoration of our drawing rooms; or, if we are exhibitors, for our vases of decorative Roses. is wonderful how the vigorous growers will endure such treatment. I use the word endure advisedly, for no dwarf Rose really benefits by having a large portion of its leaves cut away while it is in full growth. It is through the leaves that nourishment is supplied to the plant and roots, and, naturally, if a great quantity of leaves are removed during the growing period, the activity of the roots is a good deal interfered with.

There are certain varieties of Hybrid Teas, the lovely La Tosca occurs to me as one, and Mme. Mélanie Soupert is another, which put up long rods crowned with flowers, bearing but few leaves or dormant buds, and such as these may be cut with their delightful long stems, really without detriment to the plant or its future blooming; while many of the dwarf Polyanthas, notably Perle d'Or and Cecile Brunner, push up their long almost leafless flower stalks, which may be cut low with impunity. Again, the multiflora and wichuraiana varieties may be cut with just so long a spray as may be desired, for the correct time for pruning these is not, as with the Rose bushes before mentioned, the spring, but the late summer and autumn, as soon as the flowering is over, and no harm will be done by anticipating

this pruning to a certain extent. I admit it is always a grief to me to start in August and September cutting down the great sheaves of luxuriant and beautifully tinted foliage, often crowded with bunches of hips, and to see, in place of this tangle of delight, pillars twined round with the orthodox four or six new growths. I cannot help feeling that the plants must suffer from the shock, but the result the following summer always seems to justify this devastating process, the fact being, I suppose, that these climbers are so rampant, that to curtail them of some of their vigour is an advantage from the point of view of the garden.

But to cut down Rose bushes in this way would be unwise, as anyone who has seen plants of even such vigorous kinds as Caroline Testout, when they have been cut down in July or August to get buds for maidens, will have noticed; it is seldom that they make very strong growth the following year. We therefore who cut our own Roses and want plenty of flowers in the house, as well as plenty of flowers and good plants in the garden, must study the habit of each variety, and if we bear in mind the general principles of not being afraid to sacrifice some of the crowded buds, and of cutting to an outward eye, while at the same time being chary of cutting away too much foliage, having regard to the amount carried by the plant, we shall have all we want for the decoration of our houses, and we shall improve rather than impair the beauty of our Rose gardens.





DR. CHARLES LAMPLOUGH, VICE-PRESIDENT, 1914.

The Lasting Qualities of Cut Roses.

By GEORGE LAING PAUL.

On re-reading Mrs. Darlington's excellent paper on Cut Roses and their lasting qualities in last year's "Rose Annual," one is led to consider why certain kinds are so much preferred for florist purposes and why indoor flowers are so much used and so, in studying Roses with a view to their lasting qualities, one naturally turns to the florist for information. The Roses which are seen in the London shops consist of a few varieties only, and these are evidently the kinds which can be profitably grown and successfully marketed as cut flowers. A wellknown Scotch gardener recently told me that he had for years sent up to London for the decoration of the town house cut Roses which he had grown under glass; but that when he tried to do the same thing with Roses grown out of doors he was not successful, and he attributed this difference to the softer or, so to speak, more herbaceous growths of the indoor blooms.

Now this is precisely what those florists find who grow large quantities of cut Roses for the London and other markets. The best and most lasting flowers are produced by those varieties which will absorb most liquid and grow most rapidly and continuously kinds like Mme. Abel Chatenay are even sent as far as Paris, where they fetch very high prices. In America, where it is said that in the winter the morning sun will send up the temperature some 30 degrees in an hour, it has proved

possible to grow fine flowers of varieties such as American Beauty, which are comparative failures in our more sunless climate. Our growth is not so rapid and the absorption of water consequently not so great.

Such experiences, gained under well defined conditions, indicate the great importance in the preparations of Rose beds, of providing for a constant supply of moisture. We cannot so well control out of doors, as under glass, the conditions under which our Roses grow, but we can at least seethat, the drainage being adequate, the subsoil is sufficiently retentive to provide moisture at all times to the young feeding roots. Examination of the prize blooms at any important Rose exhibition will show that the stems, though strong and healthy, are by no means very woody. are easily cut with a knife and contain a considerable Even the largest bunches of the proportion of pith. wichuraianas are borne upon wood of a sappy nature. Roses, like other plants, assimilate the food they take from the soil in a liquid form, and so the best blooms are found upon growths containing much moisture. modern Rose, with its continuous growth and perpetual flowering qualities, needs constant feeding, but in a different fashion to that of bygone days. Thus a proper supply of nitrates becomes more and more essential, whilst Rosarians are rapidly coming round to the opinion that there is need for caution in the use of potash if fine flowers are to be obtained. I have not studied this point closely, but seek rather for information. There is here a wide field for the chemist and scientific Rosarian.

I dare not follow Mrs. Darlington on the question of colour or colours. Undoubtedly some of the yellows deepen in colour if kept in water some time. Mme. Hoste is kept in a dark cupboard by the florist, and thus becomes much deeper in colour. The question of yellow Roses, however, is an exceptional one, for there are two classes. Some of the kinds come a deeper and a better colour in hot sunny weather, whilst others require a cool, shady climate to

obtain perfection. The Lyons Rose, Sunburst, and the Maréchal Niel family are instances of the former, whilst Mme. Ravary is the most striking example of the latter.

Roses should be put into water immediately they are cut and the water should not be too cold, the chill being taken off. If they can then be kept some little time in a dull place before using them, they will be found to last longer and to open much fresher.



Roses for Decoration.

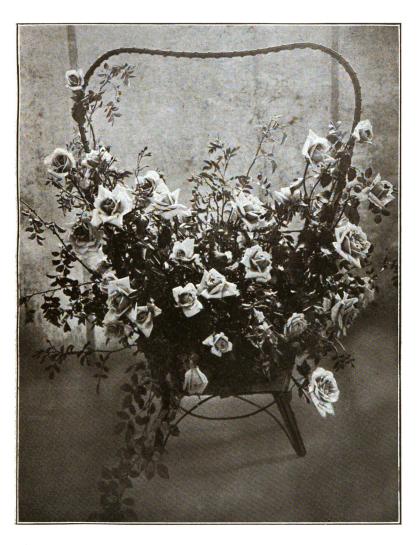
By Mrs. C. C. WILLIAMSON.

Of all the flowers the garden yields, Roses easily hold the premier place for decoration. No decorative scheme is complete without them, and no flower offers more scope in variety of colouring and character.

The great point of a floral decoration is its suitability for the occasion, and in the Rose we get variety in abundance. Is a cheery note of rich colouring required? Liberty or its near relation Richmond supplies this. A dainty colour scheme—the Lyons Rose or Lady Pirrie. A cool and restful arrangement—Frau Karl Druschki, with pale green foliage, and skilfully disposed, is hard to beat.

A welcome step in the right direction was recently made in the decree that Roses at the more important shows should be arranged with their own foliage only. "Good wine needs no bush," and Roses, beautiful in themselves, need no help from hothouse foliage to set them off. The foliage belonging to exhibition blooms may not always be suitable, but that of some of the smaller-flowered varieties, rubrifolia and various varieties of Wichuraiana, amply supplies this.

One is often asked "What is your favourite Rose for decoration?" A hard question, indeed, to answer! Every year sees the introduction of new varieties, beautiful of their kind, and offering new and beautiful colour effects. No Rose of recent introduction is more effective than Mme. Edouard Herriot, a glorious splash of colour which would strike a dominant note in any exhibition tent. Among many effective Roses for table decoration are: Lady Hillingdon, Joseph Lowe, Melody, the Lyons Rose, the beautiful Irish Rose Old Gold, and that always popular Rose, Mme. Abel Chatenay, beautiful in all its stages, from the bud to the expanded flower. Amongst the single varieties, none lend themselves



BASKET OF ROSES.

EXHIBITED BY MRS. WILLIAMSON AT THE SUMMER SHOW, 1914.

better to table decoration than Irish Elegance, though the more newly introduced Irish Fireflame seems to run it close in popularity. But it is not only in table decorations that the Rose adds its quota to the adornment of our homes. Classes for bowls, baskets and vases are seen at every show. Personally I am very fond of a mixture of exhibition varieties, and those of the Wichuraiana type, when these can be found to take up the tints and harmonise with the more important blooms in the decoration.

Varieties which I have found to mingle delightfully are Mme. Abel Chatenay and François Juranville (the latter one of the prettiest of the ramblers, both in its charming and sweet-scented flowers, and its pretty shining foliage, with bronzy tips to the young shoots), Killarney and Dorothy Perkins, Mme. Mélanie Soupert and Léontine Gervais, Mrs. Foley Hobbs and Joseph Lamy, whilst Hiawatha and the free-flowering polyantha Jessie combine with many of the red exhibition varieties most harmoniously.

A great point in all decorations is that they should be daintily fresh, and this is best achieved by putting the flowers in water the instant they are cut, and keeping them there, as far as possible, till they are wanted for use. Long sprays of ramblers cut for foliage should (particularly if young) be well soaked beforehand. Not only the stems, the whole branch should be plunged in water and kept there till thoroughly saturated. Both flowers and foliage are far less likely to droop in a hot tent if this is attended to, and any needful wiring is also better done at this stage. I am no friend to wiring (which always takes from the natural grace of the flowers), but with some varieties it cannot be helped, though it should always be done as sparingly as possible, using that "Art which conceals art" to show the flowers to the best possible advantage.

Modern decoration seems to tend more and more every year to exhibiting flowers in a way which lets the natural beauty of the object speak for itself, which, after all, is the great point to be aimed at.

Table Decoration with Roses.

By Mrs. COURTNEY PAGE.

The Editor of the "Rose Annual" has asked me to write a little about Table Decoration with Roses. The subject is most interesting and a joy to most people, but rather a difficult one to write about. I have always found that the colour scheme is the principal thing, and I prefer to use only one sort of Rose, either all pink, all red, or all yellow, with Rose foliage if possible, but of course there are times when this is not to be obtained. Then I use fern in long trails, always arranging them so that they start from the water.

The ornaments used for holding the flowers are also important; personally I prefer glass. There is nothing to compare with it in my opinion, although white china is very nice. It is better not to use silver, as there is always plenty on the table without the flower vases. Brass or copper are very crude, as is also, I think, green glass.

In starting to arrange a table, first of all, I always place the foliage into the glasses; I then take the Roses and remove all the mis-shapen or ugly leaves or thorns, splitting the stems up for an inch or two in order to make them last longer, which this will do. I next proceed to arrange first the centre-piece, and afterwards the side vases, which should be placed on the table not by any means at stated intervals. The more artistic the arrangement the more lovely the table will look. The fault of overcrowding is very common and also fatal to the appearance of the table. Moreover, it is well to remember that small vases should be as lightly afranged as possible. It is better to use pure water than anything else; sand is very ugly and dirty looking.

I hope my few hints may prove useful to those who are wanting to decorate for themselves, but of course every one should make use of their own ideas to the utmost.



Bowl of Roses exhibited by Mrs. Courtney Page at the Summer Show, 1914.

New Species of Rosa.

By W. DALLIMORE.

In common with many other genera, as the result of explorations in China and other countries, the genus **Rosa** has received numerous additions during the last fifteen or twenty years, but it is possible that these new Roses have attracted attention more slowly than other shrubs by reason of the fact that the several types of Garden Roses very largely supplant the species in the estimation of the general Rose-growing fraternity.

The species of Rosa, however, have quite as great claims upon our attention as other kinds of shrubs, for they are available for the same purposes, and are no more Although usually disregarded difficult to manage. shrubbery planting, many species of Rosa are well suited for this purpose, for not only are they beautiful when in flower, but many of them bear exceedingly attractive fruit. There are also places in the Rose Garden where certain species can be planted with advantage, for it is difficult to imagine a more lovely effect than that produced by a well grown and well flowered example of R. moschata clambering over an old holly, or a mass of R. lutea, R. spinosissima or R. rugosa in a suitable position. Moreover, many of the species are excellent as specimen bushes or for arranging as informal groups in the wilder parts of the garden. With this in view the following notes have been prepared for the purpose of directing attention to a few of the more promising of the new kinds

- R. Giraldii is a Chinese species which was introduced into this country from the Arnold Arboretum about 1908. Of vigorous habit, it is attractive by reason of its rosy red, white centred flowers, which are as much as 1\frac{3}{4} inches across, borne in large, loose inflorescences, and by its masses of oblong scarlet fruits which hang for a considerable time during late summer and early autumn. The young shoots are reddish and thickly clothed with prickles.
- R. Hugonis was introduced in 1899, seeds being sent to Kew in that year by Father Hugh Scallan from Western China. It is a very charming plant, for it has a free and graceful habit, and bears a profusion of bright yellow flowers about two inches across in April and early May These are single flowers terminating short axillary shoots, which spring from the branches of the previous year Growing about eight feet high, it produces rather small leaves, which average about three inches in length and are made up of from five to eleven leaflets. Two forms appear to be in cultivation, one of rather denser habit and less free in flowering than the other.
- **R. Moyesii.** This is one of the most distinct of Messrs. Veitch's introductions from Western China. Seeds were sent to Messrs. Veitch by Mr. Wilson in 1903 and flowering plants were exhibited five years later. In a state of nature it is found growing from five to ten feet in height, and it grows fairly strongly here. Its chief attractions are its deep terra-cotta red flowers, which are 2-in. to $2\frac{1}{2}$ -in. across, and its red fruits. The leaves grow 6-in. long and the leaflets vary in number from seven to thirteen. Seeing that it grows naturally up to an elevation of 9,000-ft. it ought to thrive throughout the British Isles.
- **R. nipponensis** was introduced from Japan about twenty years ago. Forming a bush from 4-ft. to 7-ft. high, it is chiefly remarkable for its solitary red flowers, which are from $1\frac{1}{2}$ -in. to $1\frac{3}{4}$ -in. across, and for its rich red fruits, each one being about $\frac{3}{4}$ -in. in length.





- R. omeiensis. This is another of Wilson's introductions, seeds being sent to Messrs. Veitch from China in 1901. The specific name is taken from Mount Omi in Szechuen, the place where the species was originally discovered by the Rev. E. Faber. It is a strong growing bush 10-ft. or more high, with rather small leaves, the largest being little more than 4-in. long, but made up of many leaflets, sometimes as many as 19, but usually less than 13. The solitary flowers are white with four petals, and usually well under 2-in. in diameter. The fruit is red when ripe, with yellowish stalks. It is allied to R. sericea, and is figured in the Botanical Magazine t. 8,471.
- R. sericea var. pteracantha. Although R. sericea is an old and well known species, several distinct forms have been introduced from China within recent years. Of these the variety pteracantha, which was made known to European gardens some ten or twelve years ago through the agency of M. Vilmorin, is the most distinct. It bears the familiar cream coloured four-petaled flowers of the type, with the same red or orange-red fruit, but differs from the type in the large bright red fleshy, almost transparent spines which clothe the young shoots. The colour of these fades towards the end of summer, and in year old branches has turned to a greyish brown, while the texture has become woody. The more luscious the growth the better are the spines.
- **R. sertata.** In 1907 seeds of this species were sent home by Mr. Wilson from Central China, and plants flowered some three years later. It is of moderate growth, mature bushes being about 5-ft. or 6-ft. high, and of graceful outline. The flowers are borne a few together, or solitary, on short twigs from axillary buds They are purplish-rose in colour and measure up to $2\frac{1}{2}$ -in. across. The fruits are deep red and $\frac{3}{4}$ -in. long. It promises to be a very useful kind. A figure of it is given in the Botanical Magazine t. 8,473.
- **R. setipoda.** This plant grows 8-ft. or 10-ft. high under cultivation, and produces rather large leaves as much as 7-in. long. The flowers are purplish-rose in colour, upwards of 2-in.

across, and are borne in terminal clusters. The fruits are about an inch long and bright red in colour. It bears some resemblance to the Himalayan and Chinese Rose, R. macrophylla, and is a native of Hupeh, in China. Introduced by Messrs. Veitch, it first flowered in their Coombe Wood Nursery in 1909. In upland thickets in Western Hupeh it is said sometimes to grow 20-ft. high.

- R. Soulieana. M. Maurice de Vilmorin introduced this Chinese species to cultivation rather more than twenty years ago. It is a very strong growing plant of the R. moschata type, attaining more than 12-ft. in height, with a dense habit, intensely spiny shoots, and rather glaucous leaves, which are 3-in. or 4-in. long. The creamy white flowers, each about 1½-in. in diameter, are borne in large clusters in July, and are succeeded by orange coloured fruits. It is an excellent kind for the wild garden.
- R. Willmottiae. This promises to be a useful shrub, and is rather near R. sertata in appearance, but smaller in all its parts, growing 8-ft. or 10-ft. high. It has a graceful habit, with greyish branches, small leaves and solitary purplish-rose flowers, which may attain 1½-in. across. The roundish fruits are red in colour. It is a native of Western China, and was introduced by Messrs. Veitch from seeds which were collected in the Nim Valley at between 7,500 and 9,500 feet elevation.







Rugosa Roses.

By H. R. DARLINGTON, Hon. Secretary N.R.S.

The Rugosa Roses, also known as the Ramanas or Japanese Roses, form a very interesting group, but perhaps have scarcely attained the popularity that their merits deserve. Yet for certain purposes they are well worth the attention of rosarians. They are wonderfully hardy, growing and flowering freely in the most exposed situations, even close to the sea. They are attractive alike in their strong, handsome foliage, their delightfully fragrant flowers, and, most of them also, in their large, brightly coloured fruits. They vary considerably in habit of growth, some forming neat bushes about 3-ft. high and 2-ft. or more across, while others if allowed will form huge shrubs 12-ft. to 15-ft. in stature, and there are sorts of intermediate sizes, the majority naturally growing into well shaped bushes 5-ft. or 6-ft. in height. There are two of them, Rugosa repens alba and Rugosa repens rosea, of a climbing or creeping habit of growth, which, if given sufficient room, grow into great masses 4-ft. to 6-ft. high and 20-ft. or more through; thus it will be seen they afford plenty of choice when the purpose for which they are wanted has been decided upon. In the whole Rose family there are none which as a group make more easily managed or better hedges, and it is for this purpose, or for growing as free bushes, either in isolated positions or in an open shrubbery, that they are more peculiarly adapted.

The perfume of the flowers is very sweet throughout the whole group, and in those, such as Rose à Parfum de l'Hay, to which the damask scent is added, we get flowers which are perhaps the most fragrant of all Roses. In addition to these advantages the Rugosas are as a group comparatively free from disease, and they are perpetual, that is to say they flower a second time in autumn, and some will be found in flower practically the summer through.

On the other hand they have certain, and rather decided, They do not in any way take the place of our ordinary garden Roses, such as the H.T.'s and Tea Roses, as occupants of our beds and Rose borders. Their petals are frequently apt to be somewhat floppy, and the flowers do not really last well when cut and placed in water, consequently they are seldom seen at our shows, and only a few of them are of much value for the decoration of the house. While the single flowered kinds are often very beautiful, the double forms that have been obtained hitherto are for the most part of rather poor quality in the matter of form. There are a few exceptions. Conrad F. Meyer and its white sport Nova Zembla are usually well shaped, frequently also Daniel Lesseuer, Mme. Georges Bruant, Mme. Lucien Willeminot and Messrs. Paul & Sons' most recent addition to the group, Dolly Varden. But taking the double members of the Rugosas all round beauty of form is not their strong point.

The majority are essentially outdoor plants, and perhaps in considering their place in the garden we ought to think of them rather as flowering shrubs than in the light we usually regard our garden Roses. This applies also to our pruning of them, and in this respect they are decidedly accommodating, for they will do very well with practically no pruning at all, merely having the old wood removed every three or four years when the bush begins to become too dense, or if preferred, and the position they occupy seems to require it, they may be pruned either moderately or even rather hard each spring. It is usual to do what pruning is required during February, and it is certainly convenient to get their pruning finished before the bulk of our garden Roses require attention, but it may really be taken in hand in any spell of open weather during autumn or winter, for they are so hardy that there is little fear of the Rugosas suffering from frost by reason of the pruning being carried out too early.

HISTORY.

The history of the Rugosas bears some resemblance to that of the hybrids of R. multiflora, in the sense that something like a hundred years elapsed after the discovery of the species before their development as garden plants was at all seriously taken in hand.

R. rugosa rubra and also the white form R. rugosa alba are generally attributed to the Swedish botanist and traveller Carl Pehr Thunberg, under the year 1784, in which he published his "Flora Japonica." It seems, however, possible that this Rose was introduced even earlier than this, under the name R. kamtchatica. The early history of these Roses rests in some obscurity, but is not without interest and deserves a short notice.

In the year VIII of the Republic (1800) Ventenat, the gardener of the Empress Josephine, published his "Description of the Plants cultivated in the Garden of J. M. Cels," wherein he described R. kamtchatica and gave a fine plate of it drawn by Redouté. Later in 1817 and 1824, Thory and Redouté gave another picture of the same plant, and it had also been figured by Andrews in 1805. Now, looking at these pictures, though there are certain differences between the portraits of Redouté, which Thory attributed to the effect of some eighteen years' cultivation, there can be little doubt that we have a plant of R. rugosa and nothing else, and in his "Prodromus" (1820) Thory expressly calls R. rugosa a synonym of Ventenat's R. kamtchatica and also of the R. ferox of Andrews.

Lindley in his "Monograph," (1820) sets out first the R. ferox of Andrews, confusing it with Marschall von Bieberstein's plant of the same name, which comes from the Caucasus, not from Japan, and is a member of the Sweetbriar group; next R. rugosa, which he had not seen and knew only from Thunberg's description, and which, as he says, contains little to distinguish it from R. ferox and R. kamtchatica, and he gives a Japanese drawing of this Rose.

Les Roses Livraison, 3A. ² This was in the folio edition, 1817.

And thirdly he gives R. kamtchatica itself, distinguishing it chiefly by its growth and the supposed possession of falcate thorns under the stipules.

Now there can be little doubt that Andrews' R. ferox is simply R. rugosa; Andrews himself says Willdenow's description of R. rugosa is meant for his ferox, as it accords with his figure. He adds that it seems by nature formed to be admired at a distance from the numerous large thorns with which the stem is surrounded. But what was Lindley's R. kamtchatica? Prof. Crepin investigated the question and came to the conclusion that it and R. rugosa were only two forms of the same specific type, a conclusion in which, after going through the evidence available (which it would take too long to set out here), I have also arrived, with the proviso that kamtchatica may be a hybrid form.

The interest of the enquiry lies in this: that Lindley tells us that R. kamtchatica had usually been considered of somewhat recent introduction to the gardens of Europe; but that it was certain that the period of its arrival might be fixed at somewhat beyond the middle of the seventeenth century. Sir James Smith possessed a specimen of it gathered in the Botanic Garden at Chelsea in 1791, but to M. Ventenat must be given the credit of having first made it known. Moreover, in the Botanical Register, vol. 5, where figures are given of both R. kamtchatica and rugosa, it is stated that kamtchatica was brought out by Cels in 1802 and rugosa by Lee and Kennedy in 1796. These dates may be accepted as the dates of their issue to the public.

But although these Roses were introduced so long ago, the greater part of the eighteenth century was to elapse before they obtained a footing in our gardens. In 1873 MM. Jamain and Forney state that they are too new to pronounce a definite judgment upon. "The Garden" for May, 1876, contains a reference to the white form, rugosa alba, and in 1880 a note from Lord Brownlow's gardener in "The Gardeners' Chronicle" shows that he was then growing

the rugosas. Otherwise we hear little of them. About this time the hybridizers seem to have turned their attention to the group, for Mrs. Georges Bruant, one of the first of the modern hybrids, appeared in 1887, and in 1889 Dr. Müller, working, I believe, in conjunction with M. Jules Gravereaux, brought out Thusnelda. Thenceforward these raisers, together with Messrs. Paul & Son, Cochet-Cochet and others, produced a great many varieties.

Besides the named garden varieties R. rugosa has formed, either naturally or artificially, a number of crosses with various other species, several of which are of considerable interest, though for the most part they have not been distinguished by garden names. I have accordingly arranged the list of the group which follows in two classes—first, the named garden forms; and, secondly, the hybrids with other species. This arrangement must be considered to be for convenience only, and to carry no special significance with it, for of course the garden varieties to which particular names have been applied are themselves of hybrid origin, having generally been raised by crossings with some garden derivative of R. indica.

SELECTION.

To those of our friends who are beginning to grow these Roses I am disposed to commend the following selection:—

Singles.

Alba, Atropurpurea, Calocarpa and, perhaps, for its perfume, Souvenir de Pierre Leperdrieux.

Semi-double.

Blanc Double de Coubert, Delicata, Fimbriata, Thusnelda and Mrs. Anthony Waterer.

Double.

Conrad F. Meyer, Mme. Georges Bruant and Nova Zembla.

I have grown all the varieties named in these lists in my own garden except where the contrary is stated.

ROSA RUGOSA.

ALBA (Thunberg, 1784?). This has large single white flowers followed by round fruits. The plant is moderate in growth, forming a bush from 4-ft. to 6-ft. high. It is a very lovely flower and a great favourite with me; the petals are a pure white and contrast well with the yellow anthers.

AMÉLIE GRAYEREAUX (Gravereaux, 1904). This is a strong grower of upright habit, making a bush 6-ft. to 8-ft high if unpruned, with large flowers rather more than semi-double of a deep purple red colour, one of the best of its particular type.

AMERICA (Paul & Son, 1895). The flowers are large and open and of a crimson lake colour. The shape is that sometimes called the American shape, which differs slightly from the true Japanese. It has large ovate fruit covered with long spines. Mr. G. L. Paul tells me that this Rose was sent to his firm in the year 1892 by Prof. Sargent, of the Hartford Botanic Gardens, U.S.A. It has proved with me to be one of the earliest to flower in the section.

ATROPURPUREA (Paul & Son, 1899). This has deep blackish crimson buds opening to maroon flowers, changing to purple as they fade. It is a most beautiful variety; perhaps the greatest advance yet attained in the singles. The berries which follow the flowers are rounded and slightly flattened. The plant is of moderate growth, from 3-ft. to 5-ft. high, and tolerably bushy.

BELLE POITEVINE (Bruant, 1894) has long buds and semi-double rose-coloured flowers. It is a strong grower of upright habit, and will make a bush 6-ft. to 8-ft. high.

BIENYETU (Gravereaux, 1906). This variety is double, but not full, the colour pink with a touch of salmon when fresh, but the form in the flower is poor. Left to itself the plant makes a bush of a nice rounded shape about 4-ft. high and 7-ft. or so across, the growth being spreading

rather than upright. The foliage is good. It is said to be a cross between a seedling from Pierre Notting and Safrano with Conrad F. Meyer. (Rev. Hort, 1st March, 1907.)

BLANC DOUBLE DE COUBERT (Cochet-Cochet, 1892) This has pure white semi-double flowers, which it produces freely and constantly, so that in the autumn flowers and fruit may be seen on the plant at the same time. The fruits are large and a good scarlet colour. The flowers are noticeable for their fragrance even among a fragrant family. It is a fairly strong grower, forming a bush from 5-ft. to 7-ft. high of a good shape. This is the best double white and quite one of the best of the group. It was derived from the Tea Rose Sombreuil crossed with rugosa.

CALOCARPA (Bruant, 1895). The flowers are single and rosy pink in colour. The fruits are produced abundantly and are a bright scarlet and shiny. They are not quite so large as in some varieties, and are pendulous. This plant is a strong grower, reaching from 6-ft. to 8-ft. if unpruned; it appears to be one of the most commonly grown. It was obtained from R. rugosa × Common China.

GARMEN (Lambert, 1906). This has bright crimson flowers with golden anthers, which are very fragrant. The blossoms are single and very freely and continuously produced, but it forms no bright coloured fruit. Sometimes there are a few green ones. It is of good habit and moderate growth, the bush being about 4-ft. or 5-ft. high. It looks very well in the garden when in flower, for it is perhaps the best colour among the crimsons.

CHÉDANE GUINOISSEAU (Guinoisseau, 1895) has deep rose coloured double flowers, followed by berries in autumn; it is fragrant and continuous.

COMTE D'ÉPREMESNIL (Nabonnand, 1892) has double flowers of a deep reddish violet, not one of the most attractive. It is a strong grower and will reach 7-ft. or more if unpruned.

CONRAD F. MEYER (Müller, 1899; Froebel, 1900). This is a very strong grower, often sending out shoots 8-ft. and 10-ft. long. The flowers are full and the best shaped of the group, clear, silvery rose in colour, fragrant and continuously produced. If allowed to grow as it will, it forms an enormous shrub of upright habit, but it also does well trained as a hedge or grown on a wall. It is sometimes described as a seedling from Mme. Gabriel Luizet, but it seems that it was, in fact, obtained by crossing an unnamed seedling from Gloire de Dijon × Duc de Rohan with the rugosa var. Germanica (see Journal R.H.S., vol. 30, p. 451). It generally gives us the first well shaped double Rose in the garden towards the end of May. Everyone should grow it.

DANIEL LESSUEUR (Cochet, 1908). This is another strong grower, with full double flowers of large size and often well shaped, of a nankeen yellow colour, the buds shaded coppery pink, a new colour in this group. It forms berries freely, but most of them remain green; only a few turn red. From the habit of growth one would imagine it related to the Dijon Teas, but it is said to have been derived from the cross Pierre Notting × Safrano × rugosa. I find it best to peg this Rose down. It is too straggling to make a good bush.

DELICATA (Cooling & Sons, 1898). This has soft, rose pink flowers, freely produced. The petals are large and a pleasing colour when fresh. It is one of the best. It is a fairly strong grower and makes a big bush if left alone. There is a large specimen at Kew between the rock garden and the glasshouses.

DOLLY VARDEN (Paul & Son, 1914). This is the latest addition to our group and it is welcome. The flower is semi-double, of a soft peach pink colour, with orange pink buds, the petals are rather longer, and the buds more pointed than is the case with most of the Rugosas, and the flower is often prettily shaped. Its growth is of quite manageable dimensions, and it will form a neat bush when

grown from 3-ft. to 4-ft. high. Approaching as it does the Hybrid Teas, I think it is desirable to give Dolly Varden a certain amount of pruning in the spring, though this need not be severe unless the position requires it.

FIMBRIATA (Morlet, 1891). This is a very pretty variety. The flowers are white tinted and edged blush, and are remarkable in having the margins of the petals fringed or serrated, rather like a pink. The flowers are single. The growth is moderate, and it forms a bush about 4-ft. high. It is the result of a cross between Mme. Alfred Carrière and R. rugosa.

GERMANICA (Muller, Gravereaux, 1890). This variety has single Rose coloured flowers. It is of moderate growth, making a bush 3-ft. or 4-ft. in height. The chief interest of this plant, for the possession of which I am indebted to the kindness of M. Jules Gravereaux, lies in its having been the parent of Conrad F. Meyer and some other members of the group. Dr. Müller seems to have brought out another Rose of the same name in the year 1900, which I have not seen.

HELYETIA (Froebel, 1897) has white flowers carried in trusses, single or nearly so, succeeded by bright coral berries. The foliage is curious in having a hoary appearance.

HIMALAYENSIS, synonymous with R. rugosa fl. pl.

HILDENBRANDSECK (Lambert, 1909). This plant makes a very pleasing bush or a bushy pillar up to 8-ft. high. Its flowers are a silvery rose and produced quite continuously the summer through. It makes no red berrries.

KAMTCHATICA (Cels, 1802). I have already mentioned this Rose, and pointed out that the 'plant drawn by Redouté in Les Roses under this name is simply rugosa, while that drawn by the same artist and described by Ventenat in the Jardin de Cels is different, having fewer and more hooked thorns. R. kamtchatica is shown in a coloured plate in the "Botanical Register," vol. 5, p. 419, with one falcate thorn

under each stipule and densely covered with setæ but no other thorns; otherwise it is like R. rugosa, with the typical dull rose coloured flower. It is also figured in the "Botanical Magazine," vol. 59, where more thorns are shown. These plates follow Lindley's description, who I fancy had only seen dried specimens. I have for some years grown a plant of this Rose, which corresponds fairly well with that in the Botanical Magazine, but is quite unlike that in the Botanical Register. It has reddish stems and has all the appearance of a hybrid rugosa. There is a thorn larger than the average under each stipule, which is sometimes falcate, but nearly as often straight.

LE GID (Vigneron, 1906). I have found this Rose somewhat disappointing. It is described as bright crimson, but the flowers borne by my plant have been a dull reddish rose, semi-double. It has not developed proper berries. The parentage is given as Conrad F. Meyer × Belle Poitevine.

MADAME ALYAREZ DEL CAMPO (Gravereaux, 1906) has large buds and flowers, rosy flesh tinted salmon. Of the many varieties of rugosa I have tried as pillar Roses this is one of the few I have retained in this form.

MADAME ANCELOT (Gravereaux, 1906). This has large double flowers, flesh pink with lighter reflexes. It is a very big grower, and in good soil attained some 10-ft. or 12-ft. in height. Not finding the flowers very attractive I moved it to a shrubbery border, where it has proved more manageable. Its parentage is given as Reine des Iles Bourbon × Maréchal Niel × Perle des Jardins × Rugosa Germanica.

MADAME BALLU (Gravereaux, 1915), soft rose pink, a pretty colour but poor shape. It is a strong grower reaching 6-ft. to 8-ft. in height.

MADAME CHARLES F. WORTH (Schwartz, 1890). This has double carmine coloured flowers carried in large bunches. It is a vigorous grower and makes a good bush some 5-ft. or 6-ft. high.

MADAME GEORGES BRUANT (Bruant, 1887). This is a double white variety, nearly full, and often comes a fair shape. It comes into flower a little later than Blanc double de Coubert, and though of better form is not so showy in the garden, nor is it quite so pure a white. It is said to have the same parentage as this Rose, i.e., the Tea Rose Sombreuil crossed with the rugosa of Thunberg, but while Blanc double de Coubert is nearer to the typical R. rugosa Mme. Georges Bruant partakes more of the Hybrid Teas (see "Jo. R.H.S.," vol. 29, p. 42). Both varieties have much the same vigour of growth 5-ft. to 7-ft.

MADAME HENRI GRAVEREAUX (Gravereaux, 1905). A rather large double cream coloured flower with a pink centre. A strong grower, said to be derived from Marie Zahn (H.T.) \times Conrad F. Meyer.

MADAME JULIEN POTIN (Gravereaux, 1912). This is a recent addition to the group, and has double flowers of a pretty carnation pink colour, but appears inclined to suffer somewhat from mildew. I have, however, only had it for one year in my garden.

MADAME LABORIE (Gravereaux, 1905) has bright pink double flowers and nice buds. The parentage given is Général Jacqueminot × Emperor de Maroc × Conrad F. Meyer, but it has little resemblance to the two first named Roses.

MADAME LUCIEN WILLEMINOT (Gravereaux, 1905). This has double flowers nearly full and often a fair shape, of a soft salmon rose colour. It is stated in "The Garden" for 1911, p. 338, that this Rose came from Conrad F. Meyer × Safrano, but Mr. G. M. Taylor has kindly informed me that on the authority of Dr. Müller the second parent should be Belle Poitevine. In habit of growth it much resembles Conrad F. Meyer, but the flowers are not quite so full, softer in colour, and I think slightly more continuously produced. It is rather a favourite with me.

MADAME RENEE GRAYEREAUX (Gravereaux, 1906) has soft pink cup-shaped flowers, and arose from a cross between Conrad F. Meyer and Safrono (see "Rev. Hort.," 1st March, 1907).

MADAME TIRET (Gravereaux, 1907) has carmine centre and pale pink outside to the petals. It is a big grower with nice brownish wood. From a seedling between Pierre Notting and Cardinal Pattriyi crossed with the rugosa Germanica ("Le Jardin," vol. 21, p. 355).

MADELINE FILOT (Gravereaux, 1907). A double flower, pink with rose reflexes, from a seedling between Reine des Iles Bourbon and Perle des Jardin crossed with the Rugosa Germanica ("Le Jardin," vol. 21, p. 355).

MERGEDES (Guillot, 1900). This is a very pretty flower in colour, which is a soft carnation pink on a white ground, and double. It is stated to be very hardy and vigorous, but curiously enough it is the only rugosa I have ever had that has not done well with me. My plant has never grown more than about 2-ft. in height, with a slightly spreading habit. I shall have to make a new start with another plant.

MRS. ANTHONY WATERER (Waterer, 1897). This has deep crimson carmine semi-double flowers, which are quite remarkable for their fragrance, which at times will scent the air around the plant. It is a moderate grower of slightly spreading habit, making a wide bush 3-ft. or 4-ft. high. It is said to come from the cross Général Jacqueminot × a hybrid rugosa, and is one of the best of the group, but I do not remember seeing any berries on the plant.

NOYA ZEMBLA (H. W. Mees, 1906), a white sport of Conrad F. Meyer, which it resembles both in habit of growth and in the form of the flower, which is generally well shaped. Like most white sports the colour of the flowers is apt to vary somewhat. I have thought that in recent years they have been a better white than they used to be when my plant was young.

REGELIANA appears to be synonymous with rugosa Rubra.

REPENS ALBA (Paul & Son, 1903). This has white flowers and long, creeping, flexuous, but stout stems, which will in course of time form a huge, impenetrable bush, 4-ft. to 6-ft. high and of great width. It was obtained by crossing rugosa with wichuraiana ("The Garden," 1910, p. 979).

REPENS ROSEA is similar to the last, but has large deep rose flowers, also single.

ROSE À PARFUM DE L'HAY (Gravereaux, 1904). This has large full double flowers of a dark carmine crimson, not usually well shaped, though one occasionally comes across a nice flower, but so fragrant that this Rose was selected by M. Jules Gravereaux, as the most highly scented of all Roses, for the purpose of making perfume. It is the result of a cross from an unnamed seedling from Général Jacqueminot × R. damascena with var. Germanica ("Jo. R.H.S.," vol. 30, p. 451).

ROSE APPLES (Paul & Son, 1896). A plant of good habit, about 5-ft., with pale rose flowers and large berries freely produced. A capital hedge plant.

ROSERAIE DE L'HAY (Cochet - Cochet, 1902) has dark red double flowers, freely produced. It is a strong grower.

RUBRA (Lee & Kennedy, 1796). This is Thunberg's type. It has single reddish violet flowers of a rather ugly shade of colour, followed by bright fruits of good size. It appears to be synonymous with Regeliana, at least for garden purposes.

SCHNEEZWERG (Lambert, 1911). This is a beautiful little semi-double flower of a very pure white, freely produced. I have not noticed any berries. It is said to be a hybrid with R. bracteata, and grows about 3-ft. high.

SOUVENIR DE CHRISTOPHE COCHET (Cochet-Cochet, 1894) has pink flowers flushed carmine, semi-double, and a few large berries.

SOUVENIR DE PHILEMON COCHET (Cochet-Cochet, 1899) has nearly double flowers, white tinged salmon. It is a natural seedling from Blanc double de Coubert, but I do not like it so well. It is not, however, quite so strong in growth.

SOUYENIR DE PIERRE LEPERDRIEUX (Cochet-Cochet, 1895) has a large open flower, scarcely semi-double, and deep purplish rose or violet, very fragrant, with an added sweetbriar perfume. The plant grows 3-ft. to 4-ft. The colour is very distinct and pleasing when quite fresh, otherwise it is not specially attractive, and the chief point of this Rose is its fragrance.

SOUYENIR DE YEDDO (mentioned by M. Emile Koehne in his Deutche Dendrologie, 1893), full pink, said by M. Koehne to come from R. rugosa × damascena, but Prof. Crepin found it difficult to admit the latter parent (Bull. "Soc. bot. Belg.," vol. 31, p. 131). I have not grown this plant.

THUSNELDA (Muller, 1889) has pale salmon pink semi-double flowers produced early and late. It is a strong grower and will make a bush 4-ft. to 7-ft. high. Mr. Paul mentions it as a H.P. hybrid, which seems not improbable, but it has also been attributed to rugosa alba × Gloire de Dijon ("The Garden," 12th August, 1911). It is a charming Rose of its type, and well worth a place.

TINTED YENUS (?). Large single flowers of a delicate blush; quite pretty.

In addition to the above, M. Jules Gravereaux has raised and named a large number of Rugosa seedlings, but so far as I have been able to ascertain they have not come into commerce. The following, which are in commerce, I have not grown:—Cibles (Kaufmann, 1894), carmine, white centre; La Melusine, carmine crimson; New Century (Van Fleet, 1901), carmine rose, semi-double; Schneelicht (Geschwindt, 1894), cream; Tamogled, double, carmine.

A large number of hybrids with other species have also from time to time been found, or obtained in the garden, including hybrids with the following:—acicularis, californica, carolina, cinnamomea, Fedschenkoana, foliolosa, gallica, humilis, lutea, multiflora, nutkana, pimpinellifolia, rubiginosa, rubrifolia, virginiana.

I shall only refer to those I know something about in my own garden.

Rugosa × acicularis. This is a strong growing plant from Japan, with very spiny stems and single flowers, crimson lake in colour. It has pear-shaped fruits, and flowers again in autumn.

Rugosa × Fedschenkoana is also a strong grower. It has slightly glaucous foliage, and bears numerous trusses of light coloured flowers followed by showy fruits. It flowers in autumn as well, so that flowers and fruit are seen on the plant at the same time. It is well worth a place in an open shrubbery.

Rugosa \times **foliolosa** is a pleasing little plant, constantly in flower with pretty rosy pink flowers, but it forms no berries. It grows from $2\frac{1}{2}$ -ft. to 3-ft. high and makes a well shaped bush.

Rugosa × humilis is a natural hybrid producing constantly large heads of nearly crimson flowers. It is a handsome plant for a hedge. I have noticed no berries.

Rugosa × lutea. This is also known as R. heterophylla (not that described by Woods under that name, which belongs to the Tomentosae). It has rather snowy white or cream coloured flowers, carried in small trusses, single or

nearly so. It is a somewhat dwarf grower, my plant, which I have had for some years, never having attained more than 2-ft. in height, and only possesses two shoots. I have never seen any berries on the plant, which appears to be quite sterile.

Rugosa × multiflora. Siebold's R. iwara is believed to represent this cross (Crepin Prim., p. 268). My plant is a strong grower, bearing clusters of flowers, the petals white with incised edges. The fruits do not set. Though similar to Siebold's iwara, I do not think it is identical.

Rugosa × rubiginosa. Though not so strong in growth as the last, this plant produces berries in quantities, which are bright and decorative.

R. NIPPONENSIS, described by Mr. Dallimore on page 28, will, I think, one day be regarded as a rugosa hybrid.

R. MUSCOSA JAPONICA is a curiosity among Roses. It seems like an attempt by a rugosa to become a Moss Rose. Every year it throws up a young stem, about 2-ft. high and nearly \(\frac{1}{2}\)-in. thick, densely covered by Rugosa-like spines and moss. It looks as though it might be a whimsical relative of our group crossed with centifolia, but I do not know how near it may be.

There are many problems connected with the Rugosas which remain unsolved; e.g., why do many of the hybrids set their fruit with the greatest freedom, while others are consistently sterile? It might easily be conceived that the double flowers would tend to be sterile, and the singles fruit-bearing. But the rule is not so simple. If we leave the indica hybrids and look only at the few crosses with other species that are known to me, we find the hybrids of rugosa with acicularis and Fedschenkoana have fertile berries, while those with foliolosa, humilis, lutea, and multiflora are sterile. Here a point is at once obvious. R. acicularis and Fedschenkoana are both members of the same section, the great section of the Cinnamomeæ, according to Professor Crepin's arrangement, to which R. rugosa also belongs. On

the other hand, the four which produce non-fertile hybrids belong to different sections, R. foliolosa and humilis to the section Carolinae, R. lutea to the Luteae, and R. multiflora to the Systylae. If this is an explanation, then the crosses with R. californica, cinnamomea and nutkana should also be fertile, while the other hybrids I have mentioned might be expected to be sterile. This does not explain why the hybrid with rubiginosa is so fertile. Are hybrids between other members of the section Caninae and rugosa also fertile, e.g., that with rubrifolia? I should be much interested in any information on this point from anyone to whom these hybrids are known.



How to Succeed in the Cultivation of the Rose "Mrs. Edward Mawley."

By EDWARD MAWLEY, V.M.H., President N.R.S.

Last year, when I was Editor of the "Rose Annual," I promised to ascertain from some of our leading experts, both Amateur and Professional, who had been most successful in exhibiting so finely that beautiful but difficult Tea Rose, "Mrs. Edward Mawley," the secret of their success, and also under what conditions they had succeeded in growing and flowering it so well, and now I fulfil my promise:

That this Rose cannot be so very exceptionally difficult to flower well is shown by the fact that in 1910 "Mrs. Edward Mawley" was staged at the Society's leading exhibition in no fewer than 100 prize stands, or in many more stands than any other Rose whatever at that show, and not only so, but more frequently than any other Rose at any show the National Rose Society has ever held.

This investigation may, I hope, also serve a useful purpose by indicating how other beautiful Roses of a similar character may best be cultivated.

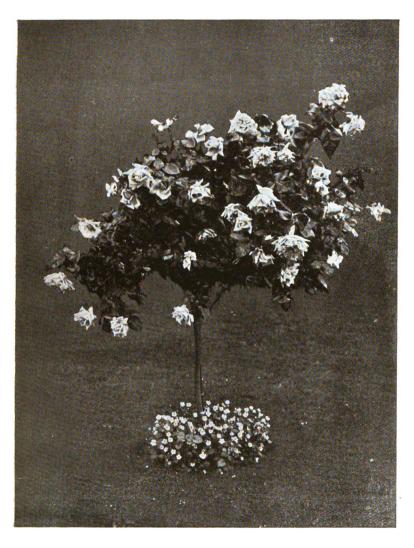
I must leave my readers to gather for themselves from the hints supplied by my correspondents those which they consider most applicable to their own particular soil and position. I cannot offer any advice of my own, as although I have cultivated this variety ever since it first came out, and have occasionally exhibited blooms of it, I must confess those blooms have been very few and far between. I hope, however, with the hints here given, to make a fresh start this year with every expectation of better success in the future.

By Alexander Dickson,

Newtownards, Co. Down, Ireland.

(The Raiser of "Mrs. Edward Mawley.")

We grow this Rose on standards and treat it as we do the Cochet family, pruning long, and afterwards thinning



A FINE HALF-STANDARD OF MRS. EDWARD MAWLEY (T.) IN THE GARDENS OF HEXTON MANOR, HERTS, THE RESIDENCE OF MR. G. H. HODGSON.

out superfluous and badly placed growths. In disbudding we usually allow two buds on a shoot until the chief bud has attained a fair size, when the second flower bud is removed. In this way we get well formed blooms.

By C. E. Cant,

THE OLD ROSE GARDENS, COLCHESTER.

This is a very beautiful Rose and of great service to the exhibitor, but no good for cultivation as a bedding variety, the flowers being heavy and drooping in habit. It delights in a rich loamy soil, neither too heavy nor too light. The situation should be in the open, well away from any trees and yet not exposed to the greatest heat of the sun. Plants should be obtained on standard or half-standard briars. This, like other Teas, is much better on this stock than on any other — producing finer blooms, while the plants themselves seem to ripen their wood better in the autumn, and consequently are not so liable to injury from frost as those grown on dwarf briars.

Good rotten stable or farmyard manure is the safest to use, either when preparing the beds for new plants or for those already established. In the latter case, if dug in during January or February, it will be sufficient for all purposes, as this particular variety must not be too generously treated. If given artificial manure as an additional help, it is liable to produce excessive growth, and consequently split and worthless flowers.

This Rose should be pruned early in April, cutting the shortest shoots hard back and leaving the longest and strongest nine inches to a foot long, care being taken to see these shoots are not injured by frost, in the event of which they must be cut back until sound wood is met with. The object in leaving some of the shoots long is that the most regular flowers are generally found on them.

By the Rev. J. B. Shackle,

St. Anne's Vicarage, Dropmore, Maidenhead.

"Mrs. Edward Mawley" cannot be recommended for ordinary garden purposes, but with special treatment there are few Roses as good for the exhibition box. Its one great fault, in my experience, is the difficulty in keeping the

plants of it vigorous for any length of time. In this garden it has only a short life of usefulness. As a maiden plant the growth is first-rate, with grand foliage. I have had splendid flowers the second season, but it grows weaker each succeeding year. I have never cut a really good bloom either from an old or from a dwarf plant. For some years I have budded it only on half-standard stocks grown in a light, stony soil, and when in growth fed it liberally with very weak liquid manure. Thus grown it is nearly always good, though I think it comes best in a cool season. In hot weather the blooms are apt to split, but its worst fault, from my point of view, is its precociousness. Here in most seasons the best blooms come about the middle of June, though I have taken a medal with one, in good company, as late as July 10th.

By W. D. Prior,

Rose Nurseries, Colchester.

In our own nurseries this beautiful Tea Rose is budded on the dwarf stock, known as the "briar-cutting." The first year after budding it makes very strong growths of from twenty-one to twenty-two inches in height. It has a good branching habit, and the blooms are freely produced on thick erect stems. These blooms, which are clear carmine shaded pale salmon, are of great substance and beautifully formed. In order to obtain the highest honours with this variety at an exhibition, the usual thinning out of the side shoots, disbudding and shading must be carried out.

After the first year of flowering it is very disappointing. In fact, it appears to deteriorate annually, and often dies altogether after three or four years. We have tried this Rose in light gritty loam and also on heavy soils in ideal situations, and in both cases the plants have ultimately disappeared. Liberal dressings of well-decayed manure are essential. A good dressing of Clay's Fertilizer when the plants are in full growth and after the buds are formed is advisable.

I may add that two years ago we gained the N.R.S. Silver Medal for the premier bloom of any Tea Rose at the Society's Provincial Show at Gloucester, and a week later we had the finest bloom of "Mrs. Edward Mawley" we had ever seen.

By F. Slaughter,

STEYNING, SUSSEX.

"Mrs. Edward Mawley" is essentially an exhibitor's Rose. I find I obtain my best blooms from maidens budded on standards from about 3-ft. to 4-ft. high. The first year they make a very large head without pinching back, etc., and give very fine blooms on thick erect wood, but many of the finest blooms are split. I grow them on as cutbacks, but seldom get such fine blooms from them as on maiden plants, although I have taken a medal for this Rose with a very fine bloom cut from a three-year-old plant, but this is the exception.

If pruned very hard the plants make good heads each year, and are continually blooming throughout the summer and late into the autumn, but cutbacks have a nasty habit of hanging their heads owing to the wood not being stout enough to support heavy blooms.

I find the plants quickly deteriorate, seldom surviving heavy feeding and severe pruning for more than three or four years.

I value this Rose very highly, consequently I bud about thirty of it every year, and yet my stock never seems to increase, showing that the trees are not long-lived, and if a plant does not throw satisfactory growth I quickly consign it to the rubbish heap, as it will never recover. I always choose strong stocks to put the variety on, and bud from the wood of maiden plants. I feed it exactly the same as all my Teas. It does not like too heavy a soil and has a particular aversion to any semblance of clay. It is not very hardy and will not stand a severe frost without protection. It always comes better in a wet season, and does not like too much sun. The flower greatly objects to being tied up on the plant.

By Frank Cant,

BRAISWICK ROSE GARDENS, COLCHESTER.

This Rose is seen in the most perfect phase of its possible beauty when grown under glass on half-standards in pots, therefore it may be reasonably assumed that it requires perfect drainage, fairly rich soil and warmth; and this is confirmed by the fact that when seen at its

best in the open the weather is generally warm and humid and the situation sheltered. The flower being large and very full, this variety does not require heavy feeding, or the blooms will be coarse and many of them split inside the second row of petals. The plant must be hard pruned, and not disbudded until the crown bud has attained the size of a pea. The soil is of less importance, as I have grown medal blooms of this beautiful Rose on very light, medium, and very heavy soils-on standards, half-standards, and dwarf briar stocks, but I give preference to half-standards. The situation must be sheltered from south-west winds, and the growths need protection from frost in winter. If grown on heavy soils, leaf mould and cow manure should be incorporated, and the beds in which the plants are to be grown should be drained, and if possible slightly raised above the level of the surrounding ground.

By A. E. Prince,

Longworth, Berks.

There are some Roses, not very many, which should be replenished about every two or three years, and "Mrs. Edward Mawley" is certainly one of these, and one which well repays this extra trouble in cultivation. We have always cut our best blooms from half-standards of about 2-ft. 6-in. in height, but blooms from the maiden plants come too large and many of them badly split. The two-year-old plants give the finest blooms. The third year the plants begin to decline in vigour; yet even then a few grand blooms may be occasionally cut. But after that time the wood develops dark markings and, if cut back hard, the plants gradually die down and are of no ornament or use.

It is best planted on a good rich loam, well drained, and grown with plenty of well decayed cow manure. The wood should be carefully thinned out, leaving about three to four of the best shoots. A top dressing of artificial manure when the buds are about as large as buck-shot should be given.

We find "Mrs. Edward Mawley" does best grown in a bed well away from a wall. It is a variety which requires moderate pruning, but of course must be cut back to sound wood.

Rose Growing in Western Australia.

By J. C. WINDSOR, of York, Western Australia.

Western Australia runs 1,000 miles north and south, consequently the climatic conditions vary considerably in different portions of the State. These notes apply more particularly to the part known as the Eastern Districts, situated inland from Perth, the capital.

English readers will realise the vast difference here in Rose growing conditions from their own when I state that our summer extends over six or seven months, and during that period practically no rain falls, while the shade temperature frequently reaches 100 degrees to 110 degrees, and occasionally more. A few light frosts are experienced in the winter.

Rose growers are fortunate in being able to obtain from the nurserymen about 1,000 varieties, including recent introductions, at moderate prices. The new varieties can usually be obtained here for 3s. 6d. at a time when English growers are paying 5s. to 10s. 6d. for them. Older varieties run 9s. to 12s. per dozen.

The soil is mostly clayey loam, while pests are not very serious, aphis and mildew being the worst—if we except the water meter in the garden, ever registering at 5s. per 1,000 gallons.

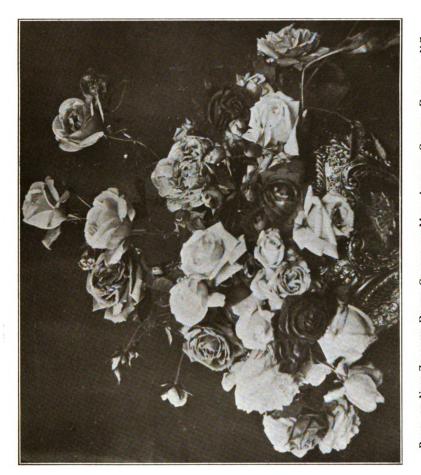
July is our pruning month, October the month for Shows. Owing to our genial winter we usually have to prune off a few shoots of Teas and of some Hybrid Teas with blooms on them. More or less blooms are obtainable the whole year round, my wife seldom being without a vase or two of them. Roses may be budded during eleven months of the year and it is not necessary to remove the wood in budding.

The long, hot summer is, of course, trying for the plants. The blooms during two or three hot months are poor and do not last, and on very hot days the petals of the Roses get scorched dry and crumble to powder almost at a touch, while a bud hard at night is fully opened next day.

Roses are worked mostly on the Adelaide Briar, a species of the Dog Rose, but many Roses, and particularly the Maréchal Niel, Fortune's Yellow and Frau Lilla Rautenstrauch, do best on the Banksias. The bark on standards on the sunny side usually gets scorched and perishes in a few years, then dry rot sets in and the plants deteriorate and die out. It pays to replant as a rule every five or six years, and as far as possible to let the plants rest during the hottest months of the summer to ensure a generous autumn and winter flowering.

Having visited your magnificent 1913 National Show, I was able to make comparisons as to quality of blooms with ours, and concluded we obtained Teas and some Hybrid Teas equal to those shown, but were outclassed in Hybrid Perpetuals. Kaiserin Augusta Victoria, Maman Cochet and White Maman Cochet, Liberty and some others apparently do better with us than in England, while Killarney, Madame Mélanie Soupert and similar thin Roses are not worth growing here. I except Betty, which is a fine autumn Rose. Your Mrs. John Laings and Caroline Testouts clearly surpass ours, but speaking generally a Rose with a good name in England gives satisfaction here.

In conclusion, I would mention that English Rose books state the Banksias flower in England on the laterals only. Here the strong, long shoots also flower freely and provide sprays to be measured by the yard.



Dates of Blooming.

By WALTER COWLEY.

Every spring the Rose-lover is on the look-out for the earliest blossoms on his favourite plants. To many (in the North, at any rate) it may be of interest to know on what dates certain varieties actually came into bloom in 1914; and when, approximately, they may be expected to open their first flowers. The observations here recorded are from a small garden in Cheshire. With me Gloire de Dijon and Common China annually compete for the honour of a first appearance in bloom, and one or the other usually wins.

In the previous five years first arrivals have been as under:—

Gloire de Dijon June 12th June 8th May 30th May 21st June 5th
Common China June 16th May 31st June 5th

But last season neither of these hardy subjects attained the coveted position, for Nova Zembla (rugosa) expanded its earliest flower on May 26th, whilst Juliet (H. briar) appeared May 30th, second on the list. By the middle of June 67 different varieties had come into bloom.

The following is a record from my diary, showing on what dates exactly each of the enumerated Roses produced its first flower:—

May 26th Nova Zembla.

- " 30th Juliet.
- " 31st Gloire de Dijon and Edu Meyer.

June 1st Common China.

- ., 2nd François Crousse.
- ,, 3rd Climbing Mrs. W. J. Grant and Lady Waterlow.
- ,, 4th Mrs. David McKee.

- June 5th Antoine Rivoire.
 - .. 7th Ards Rover.
 - , 9th Alister Stella Gray and Viridiflora.
 - ,, 10th Lady Ashtown, Crimson China and Maharajah.
 - ,, 11th Cecile Brunner, Katherine Zeimet, Madame Ravary and Irish Elegance.
 - , 12th Green Mantle, Gruss an Teplitz, Liberty and Crimson Crown.
 - , 13th Lyons Rose, Betty, Carine, J. B. Clark, Richmond, Paul Lédé, Cynthia Forde and Anna Olivier.
 - ,, 14th Madame Lambard, Madame Jules Grolez, Madame Antoine Mari, Joseph Hill, Laurette Messimy, Mrs. W. J. Grant, Edward Mawley, My Maryland, Captain Hayward, Pharisäer, Dorothy Ratcliffe, Mrs. Peter Blair, H. Armytage Moore, Lady Pirrie, Gustave Regis, Princesse de Sagan, Augustine Guinoisseau, La France, Prince Camille de Rohan, Queen Mab, Madame Alfred Carrière and Madame Jules Gravereaux.
 - ,, 15th Madame Plantier, Bouquet d'Or, Viscountess Folkestone, Marie Pavie, Madame Mélanie Soupert, Harry Kirk, Caroline Testout, General Macarthur, Duchess of Wellington, Margaret Dickson, Jeanie Deans, Comtesse du Cayla and Madame Abel Chatenay.
 - " 16th Souvenir du President Carnot, Sunburst, Mrs. E. J. Holland, Gustav Grünerwald, Mrs. A. E. Coxhead and Mrs. H. Stevens.
 - r7th Mrs. Cornwallis West, La Tosca, Madame Hector Leuillot,
 Melody, Chateau de Clos Vougeot, Exquisite, Dorothy PageRoberts, Prince Arthur, Chas. J. Grahame, Victor Verdier,
 Duke of Connaught, Jersey Beauty, Countess of Shaftesbury,
 Le Progrès, Shower of Gold, Gloire de Margottin, W. E.
 Lippiatt, Souvenir de P. Notting and Frau Karl Druschki.
 - ,, 18th Antoine Rivoire, Leslie Holland, Reine Olga de Wurtemburg, Flora, W. A. Richardson, Geo. C. Waud, White Killarney and Louis Van Houtte.
 - " 19th White M. Cochet, Farben Kænigin, Hugh Dickson, Julie Mannering, M. Leon Pain, John Hopper, Crown Prince, Mrs. G. W. Kershaw, Corallina and Dr. J. Campbell Hall.
 - ,, 20th Commandant Felix Faure, Tuscany, Earl of Warwick, Marie Baumann, Mrs. A. R. Waddell and His Majesty.
 - ,, 21st Lady Ursula, Mrs. O. G. Orpen, Maman Cochet, Madame Plantier, Mrs. Aaron Ward and Geo. Laing Paul.
 - .. 22nd Homer.
 - ,, 23rd Mrs. Alfred Tate.
 - ,, 24th Climbing C. Testout.
 - " 25th Mrs. Maynard Sinton and Ænnchen Müller.
 - " 26th Gardenia, Madame N. Levavasseur, Prince Arthur, and Mrs. Edward Mawley.
 - ,, 27th Zephyrine Drouhin, Trier, Mrs. John Laing and A. K. Williams.
 - " 28th Mrs. Amy Hammond, Black Prince, Gloire de Chédane Guinoisseau, Albéric Barbier, Mrs. R. G. S. Crawford, Merveille de Lyon and Général Jacqueminot.

- June 29th Ulrich Brunner, Charles Lefebvre, Marquise Litta, Baby Dorothy and Grand Duc Adolphe de Luxembourg.
 - " 30th Duke of Wellington, Crimson Rambler, François Dubreuil, William Shean, Elizabeth, Königin Carola, Souvenir de Maria de Zayas and Ben Cant.
- July 1st Xavier Olibo, Gustave Piganeau, Helen Keller, Hon. Edith Gifford, Victor Hugo, Grace Molyneux, Mrs. W. J. Grant and Maurice Bernardin.
 - ,, 2nd Madame Edmée Metz, Horace Vernet, Blush Rambler, American Pillar, Suzanne Marie Rodocanachi and Jessie.
 - ,, 3rd Prince de Bulgarie, Mrs. E. G. Hill, and Mrs. Theodore Roosevelt.
 - ,, 4th Lady Hillingdon, Countess of Derby and Kaiserin Augusta Victoria.
 - ,, 5th Mrs. A. M. Kirker, Duke of Teck, Reynolds Hole and Avoca.
 - , 6th Mrs. F. W. Sanford and Dupuy Jamain.
 - 7th Florence H. Veitch and Mrs. Wm. Cooper.
 - , 8th Rayon d'Or and Billard et Barré.
 - ., 9th Rubens and Félicité et Perpétue.
 - , 10th Marquise de Sinety and Gladys Harkness.
 - , 11th Hiawatha and York and Lancaster.
 - " 12th Lady Roberts, Dorothy Perkins, White Dorothy and General Schablikine.



The Great Frost of May, 1914.

By GULLIVER SPEIGHT.

My garden, which is much exposed to the north and north-west, was visited on May 26th and 27th with seven degrees and eight degrees of frost. The whole of my plants were affected. The first crop of blooms was ruined. Hoping for the best, the plants were untouched; within a week all the new growth had turned black and was covered with green fly. In my fourteen years of Rose growing my plants had never looked so bad. I cut all the damaged shoots back about 6-in., with the exception of Mamie (this is still a good exhibition Rose) and Mrs. Foley Hobbs. These were eventually repruned, all the new growth coming blind. June being cold and dry, the new shoots made slow progress, with the result that the blooms I exhibited at the Botanic Show "were a very bad lot."

A fellow Rosarian whose garden is within a short distance of mine—a little higher and well protected with trees—quite escaped the frost, his Roses being in full bloom the first week in June, exceptionally early in this late district. In this garden my neighbour in making his new Rose beds uses a large quantity of burnt earth, Hybrid Teas doing best, Madame Mélanie Soupert and Mrs. Theodore Roosevelt growing between 4-ft. and 5-ft. high.

Experiences of an Amateur in 1914.

By G. O. NICHOLSON.

The season of 1914 has tended to make the past Rose year one of contrasts, and this fact is easily established when my experiences as a Rose grower are compared with those of my neighbour, Mr. Gulliver Speight, whose garden is within a stone's throw of mine, and who is also sending his experiences. As for myself I am quite a beginner in Rose culture, for I budded my first Rose in 1910, and what little success I achieved this year has been due as much to the situation of my garden as to any special precautions adopted by me in the management and protection of my trees.

It will be remembered that the autumn and winter of 1913-14 was unusually mild, and the rainfall in the late summer and early autumn was considerably under average. October and November were very wet and December to February very dry. My budded briars came through the winter very well, and about 80 per cent. of them were alive and in good order quite early in the season. I pruned my Roses about the usual times, late in March and early in April, taking a medium course between the methods of pruning for exhibition and general purposes, starting with those in the most protected positions and finishing with those in exposed ones. We experienced a slight frost on the 2nd May, and again on the 9th and 10th, when two degrees of frost were registered, with a maximum day temperature in the shade of 63°. On the 25th to 27th May the maximum and minimum temperatures were $55^{\circ} - 27^{\circ}$, $60^{\circ} - 26^{\circ}$, $61^{\circ} - 32^{\circ}$. These frosts, practically speaking, did my trees no damage, but merely checked the newer growths for a time.

I append a list of the dates of first flowering of the earliest of my exhibition Roses:—

Gloire de Dijon		 	 (before)	20th 1	May
C. J. Grahame	• •	 	 	23rd	,,
Rev. A. Cheales	••	 	 ••	27th	,,
Anna Olivier		 	 	,,	,,
Lady Ashtown		 	 	,,	,,
Mamie		 	 ••.	30th	,,
Gustav Grünerwald		 	 	,,	٠,
Lyon Rose		 	 • •	31st	,,
Mme. Mélanie Soup	ert	 	 	,,	,,
Juliet		 	 	٠,	٠,
Gustave Piganeau		 	 	,,	,,
Mme. J. Gravereaux		 	 	ıst]	une
Mildred Grant	• •	 	 	,,	,,
White Maman Coch	et	 	 	2nd	,,

It will be noticed that notwithstanding the frosts of the 25th and 27th May, I had six exhibition Roses in bloom on the 30th and 31st May, and others followed regularly quite early in June, my best blooms of the whole season being cut in June, and I have the clearest recollection that those I exhibited at the National Show on the 7th July, and with which I secured a second prize, were not equal to those I had had in the previous month.

Mr. Speight will speak for himself as to the disastrous effect of the same frosts on the Roses in his garden. The only explanation I can give for my good fortune in escaping destruction is that my Rose garden lies for the most part on sloping ground facing the south-west, having a good belt of trees and shrubs protecting it from the north and north-east winds, whereas in the garden of my neighbour there is only the very slightest protection of a low hedge.

I think my experience proves how important it is in planning or laying out a Rose garden to have some such protection to serve as a mitigation of the late spring frosts and other sudden changes of climate we may expect, at least in the Midland Counties, of this our favoured isle.

The ripening of the new growths caused by the dry summer, followed by a mild and sunny autumn, has much prolonged the flowering period of my Roses, and between the 8th and 10th November I had some 16 varieties of Roses in bloom out of doors; and it was not until the first week in December that I gathered my last Roses. Some of these had withstood nine consecutive nights' frost, on the 16th to 24th November, when the minimum night temperatures registered were as follows:—26°, 25°, 24°, 31°, 21°, 28°, 32°, 26°, 32°.



Symposium on Manuring Roses.

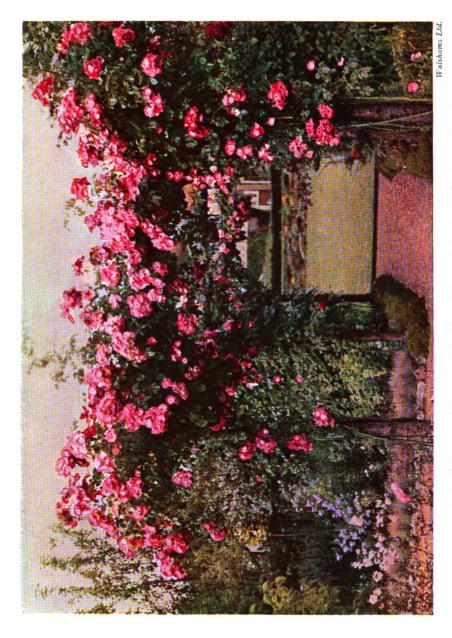
ESSEX.

By OSMOND G. ORPEN, Vice-President N.R.S.

Such valuable and exhaustive articles have appeared in modern Rose Literature on the treatment of the soil for Roses that, I suppose, only notes of my personal experience in the use of manures are required for this Symposium. These I have pleasure in making in the hope that they may be of service to some amateurs where more comprehensive and general notes might be passed over as too technical or detailed for easy application.

I would at the outset emphasise the value of thorough cultivation of the soil. We are told that the word manure was man-œuvre in its original form, i.e., manual cultivation of the soil, and I think a great deal of the benefit attributed to some manurial speciality is due to the careful manual cultivation of the soil at the time the manure is applied. One thing my experience tells me with certainty is that thorough manual cultivation of the soil, both of the surface with established plants and to a considerable depth when preparing for them, is absolutely essential, and that without this thorough cultivation manuring of any sort would be of little value.

Analyses of soils have not proved why Roses grow better in one soil than in another, nor have they proved to us what we should put into a soil—long used for Roses—to make it capable of producing blooms of the same quality as



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when these were first grown in it. Some Rosarians have their special manurial mixtures compounded for them, the formulas for which they keep as profound secrets, but I must confess at once that I am not in possession of any specific for capturing cups, medals, and other distinctions. On the contrary, I think that a change of diet is distinctly beneficial to established Roses, and I have varied the manures accordingly.

It is a strange fact that we feed the soil with the most offensive refuse and get in return enhanced beauty and sweetness. I have generally kept pigs and, for the farmyard variety, the manure from these useful animals has been the staple one, and it must be remembered that the better the food the more valuable will be the resulting manure. When I could get them, I have used sprats with These should be digged in in the late excellent results. autumn-at any rate before Christmas-as the fish then contain more oil. Our farmers used to say that one bushel of sprats before Christmas was worth as much as double that quantity later. This form of manure is practically not available except to those living near the coast. The sprats must be digged in as soon as received. On one memorable occasion I had some just as a severe frost set in, and consequently they were not put on the ground for some weeks. When at last this could be done they were decidedly "ripe" and far-reaching in aroma. Horse-manure and kilndust, wetted by liquid from cesspool, as recommended by Dean Hole, I have found very good as a top-dressing in the late spring, but I prefer just to prick this in rather than to leave it on the surface. The smell from this mixture. when fermentation has set in is, like that from sprats, very offensive and so, obviously, cannot be kept or used close to a dwelling.

I am not in favour of leaving a quantity of manure on the surface during the summer. It may do some good in a dry season, but harm is certainly done in a wet time by keeping the soil sodden and difficult of aeration. Except for the purpose of protecting low-growing blooms from getting splashed by rain—for which a littery mulch is ample—I prefer two or three inches of finely worked soil.

Good black soot from house coal I believe to be very efficacious, hoed in in the spring, but there is very little manurial value in that from furnaces where steam coals are burnt.

In the spring I usually give a dressing of superphosphate, and perhaps a small quantity of nitrate of soda when the buds appear.

There is nothing to be gained by using a stimulant like nitrate of soda unless there is some prospect of its being soon washed in. If the nitrate remains undissolved until late in the summer and is then taken down to the roots, rank growth is produced which has no chance of ripening.

The loss from the soil by continual cropping must be made good, but I think all are agreed that manuring is wasted, or even does actual harm, if the soil has not been rendered sweet by the use of either chalk, lime or gypsum. The soil must, in fact, be in such a healthy state that bacteria may be able to carry on their beneficent work, and I feel that I cannot better end these somewhat disjointed notes than by giving a quotation bearing on this point from Mr. Cousins' excellent little book:—"The soil is alive, and must be treated with all the care, deference and thoughtfulness which the proper management of all living things demands."

THE MANURING OF ROSES.

By Dr. CHARLES LAMPLOUGH, Vice-President N.R.S.

Although Roses may rightly be called "gross feeders" when growing rapidly, it must not be assumed, as is commonly done, that the manuring of Roses can be reduced to a simple basis of dung in frequent and impressive doses, both above and below the surface of the Rose-bed. Drainage, trenching, digging and hoeing are just as vital to the Rose as to any other plant, and are certainly more important than the precise contents of some special Rose manure or fertilizer. But with good cultivation there is no doubt that Roses respond well to liberal feeding, and after various modifications during the last fifteen years, I have adopted the following method for manuring Roses grown chiefly for the production of exhibition blooms, with fairly successful results.

The soil in my garden is made up of about 2-ft. of fairly light sandy loam, overlying a thin stratum of clay, with a subsoil of gravel.

When a Rose-bed is being made in the autumn, the whole depth of the soil is turned over, some of the underlying clay is mixed with the top-spit, and a liberal quantity (a good barrowload to every four square yards) of decayed cow manure is added as the trenching proceeds, care being taken to break up and mix the manure intimately with the soil, so as to thoroughly enrich the whole without leaving the manure in masses.

The beds are re-made every four to six years, but no farmyard manure is actually dug into the soil whilst the plants are in the bed.

As the soil here is deficient in chalk, a dressing of lime or basic slag (\frac{1}{2}\dagger-1b\), to the square yard) is applied and pricked in every alternate winter, but the usual winter mulch of farmyard manure was discontinued ten years ago, and it has been found that the plants have done better since the surface was left uncovered, for Roses do not require fertilizers when growth is dormant, and this is, therefore, a waste of good material. I have never attempted the practice adopted by some Rosarians of applying a heavy dressing of plastered manure to their Rose-beds in the spring, for it must prevent the warming and aerating of the soil which is so essential to healthy growth during the spring and early summer months.

In March, the beds of established Roses receive a dressing of superphosphate of lime (4-ozs. to the square yard), followed by an application of a similar amount in April. This is a fairly quick acting manure, but is most efficient when chalk is present in the soil.

In May, when the shoots are growing rapidly, a more soluble chemical manure is applied, in the form of two dressings of sulphate of ammonia at the rate of 1-oz. to the square yard. About the end of May or beginning of June, when the temperature of the soil has been raised by the sun, but before the hot, dry weather sets in, a mulching of decayed cow manure is applied all over the Rose-beds and, unless rain falls the next day, a good soaking of water is given, followed on the day after by a heavy watering (two gallons to the square yard) with weak liquid manure, made by soaking a bag containing half-decayed farmyard manure in a tub of water. This mulch is not applied if the weather in June is very wet, and is omitted altogether from those beds used for garden decoration only.

In a dry summer a heavy soaking is given twice a week with liquid cow manure, the strength of which is rapidly increased, and even supplemented by the addition of two pounds of sulphate of ammonia to the 40-gallon cask.

This heavy feeding is continued throughout June and July, or until the Roses have completed their growth after the first flowering, after which the feeding is gradually reduced in strength of solution and frequency of application, and the plants allowed to settle to the ripening process during August and September.

I have never been able to detect any harm accrue from heavy feeding in this way, indeed very strong liquid manure can be applied with the best results to established plants, from early in June onwards, without fear of damaged foliage, green or divided centres or coarseness, or similar ill-effects, sometimes attributed to liberal feeding, but methods such as these require constant personal and careful supervision, for if strong stimulating organic or inorganic manures are applied carelessly, either at the wrong time, before the trees are in active growth, or when the soil is dry, or before the plants have become accustomed to the application of these fertilizers, disaster is inevitable.

LIGHT SOILS.

By F. SLAUGHTER.

My garden is on the chalk; the natural top soil is about 18-in. of heavy marl with 18-in. of good loam. Nearly all my beds are re-made every seven years with fresh soil. I select the best loam for my Tea Roses, and a heavier loam for Hybrid Perpetuals and Hybrid Teas. This is rather of a clayey nature.

My garden lies on a steep slope facing south-west, and in making the beds special attention is paid to drainage. Roses have been grown here in the same position for nearly forty years, and it will, therefore, be readily understood that practically none of the original top soil now remains.

In dealing with the manuring of Roses, it should always be borne in mind that a few loads of bullock manure from a fatting stall, the bullocks having been fed on a liberal supply of linseed cake, is far better than tons of artificial compounds; to my mind no better manure for Roses can possibly be obtained. A liberal dressing of this should be given the Roses during the latter part of January or the beginning of February; nine or ten loads to the acre is about the strength I give to my Roses. Immediately I have covered the Rose beds with this manure I commence forking it in, that is, putting it just under the surface so that it is covered with a layer of earth.

During the months of May and June the Roses will probably require watering with liquid manure. I make it as follows:—Get about 100-gallons of liquid from a cowstall cesspool carted into the garden, and mix six gallons of this with 40 gallons of water and pour it on to the beds, giving about a gallon to each plant. I make a rule of doing this twice a week until about two weeks before the first Shows if the weather is favourable; after this time no manure of any kind is given. In giving liquid manure great care must be exercised not to apply it to newly-planted trees, or the result will be disastrous; nothing but the dressing in February and an occasional watering with plain water is required for the first year.

I always give my Teas two dressings of Clay's Fertilizer, one in the middle of May, and one a fortnight later. I take a bucket and mix the Clay's up in it into a thick paste by adding water and well stirring. I then put a trowel full of this paste into a three-gallon can and stir well while the same is being poured on the ground, and between the two doses of Clay's I usually give a dressing of nitrate of soda, about one cwt. to the acre. This I apply by sowing the crystals on the ground, if possible, before a shower; if the weather remains dry after the dressing it must be watered in.

I consider one of the most necessary things to possess in order to grow good H.P.'s or H.T.'s is a cesspool into which the whole of the sewage of the house flows. If this is judiciously applied to the beds in place of liquid manure once a week your Roses will be half as big again as those that have not been so treated. Unfortunately I do not possess this luxury, my house being connected to the sewer, but I often threaten to cut off the same and construct a cesspool in order that the refuse from the house could be utilised and my Roses be improved thereby. Teas do not revel in a dressing of sewage to the same extent as H.P.'s or H.T.'s.

This is all the manure my Roses get, except when they are planted, when I put about twelve inches of good farmyard manure under six inches of the soil, upon which I plant the trees. It must be remembered that one of the most important necessaries for the Rose soil is air. If the beds are kept forked and the soil is brought into contact with as much air as possible the trees will benefit far more from the feeding than they otherwise would.

One thing should be added to these remarks with regard to feeding such as I have detailed above. The soil on which you grow Roses will not continue to produce the fine blooms for many years. In order to be able to keep up a fine standard it will be necessary to have a piece of new ground on which to grow Roses, and give the ground that has been used a thorough rest from Roses for six or seven years. During this time the best thing to be done is to sow grass seed and turn it into a meadow for hay and grazing. If it is not possible to transfer your Rose garden in this way owing to lack of ground, the next best thing to do is to take out the existing soil for a depth of three feet and put new soil in, preferably the top spit of a piece of pasture land.

LIGHT SOIL.

By G. CURNOCK SAWDAY.

In response to a request from the Editor of the Rose Annual, I will endeavour to give as briefly as possible my experiences of manures, organic and inorganic, as applied to a soil of exceptional lightness, unsuitable in many ways for successful Rose culture. I may say at once that I have had no experience whatever with heavy soils, and therefore have had no opportunity of growing the beautiful Hybrid Perpetuals well.

When moving to my present residence three years ago, I secured as a site for my Rose garden the much coveted "south slope," perfectly sheltered from east and north-east, but having on its west side, at a suitable distance, two or three large trees to afford that shade from the late afternoon sun that the Teas particularly so much appreciate.

I was determined to do things well, and therefore submitted to Dr. Bernard Dyer, the well-known analyst, samples of soil from various parts of this slope. In due course his report arrived: "The soil you sent me is a very light sandy loam, containing about 85 per cent. of natural sand and only 15 per cent. of clay, fine silt, and other constituents." That "85 per cent. of natural sand" made me hesitate as to whether I should start date culture instead of Rose culture. The report continued: "The soil contains a fair supply of lime, and for so light a soil is naturally fairly well supplied with available phosphates and potash; use all the manure you can get, not digging it in until it has been

kept to get fairly rotten. This will help the soil to hold moisture, of which naturally it is not retentive." This cheered me up somewhat, and feeling that "Where there's a will, there's a way," I determined on having Roses.

Five of us set to work, and dug out our beds to a depth of three feet, finding about 18 inches of sandy soil on the top, followed by a deep layer of almost solid gravel. I may say that in four beds, each 80-ft. long by 5-ft. in width, we removed and sifted out 15 cart loads of pebbles. Into each of these beds we worked in about 10 loads of a good fibrous loam obtained locally, incorporating this with the local sand, much of which we had to throw out on account of its poor quality. The whole of this soil was thoroughly mixed with the best bullock yard manure obtainable. I emphasise the thorough mixture of the manure with the soil, because I do not hold with the system of making the beds in layers, where one layer holds little or nothing for the Rose, and the next an engorgement of good things. It is important, if possible, to procure bullock yard manure. The manure bought, let us say, from a dairy, is largely obtained from the clearings of the cowsheds. The sheds, owing to the stringent regulations of an ever watchful Board of Agriculture, are subjected to a periodical visit from a veterinary inspector, who insists on the washing down of these sheds with disinfecting washes. Such manure becomes saturated in many cases with fluids which, although beneficial to the community, are very deleterious to the Rose.

I made two other large beds 45-ft. by 9-ft., in which I decided to grow Teas, and in which I retained the natural soil of the garden, but to which very heavy applications of manure, bone meal to provide the phosphates, and wood ashes to supply the potash, were made. During the first year of growth no feeding of any kind was resorted to. Occasional heavy waterings were given to relieve the natural dryness of the soil. These two beds subsequently became the areas on which I decided to try a few feeding experiments during the growing season.

The beds shaped thus. I divided each into two equal

SEC. O.	SEC. I.
SEC. I.	SEC. O.

portions. Each half marked O I treated entirely with liquid cow manure during the time of growth, and employed the organic potash obtained from

wood ashes, as against the inorganic sulphate of potash, the wood ashes being applied in early spring previous to pruning, which was immediately followed by a heavy top dressing of cow manure lightly forked in to avoid damage to the roots of the Rose trees. I may remark here that I feel that autumn applications of manures are to be strongly deprecated on the principle that "a sleeping man requires no food." I am quite convinced that a bad year with aphis, mildew, etc., will certainly follow the autumn application of manure to Rose beds. coating affords a protection to the ova and spores of all the "Enemies of the Rose," and effectually prevents the proper aeration of the soil. The hoe is always kept going amongst my Rose beds right through the winter whenever the weather The applications of liquid manure, brewed from is open. cow dung and soot, were made weekly, always after rain or a In my garden watering has to be thorough watering. continuous owing to the lightness of the soil and the sharp Section I in these two experimental slope of the ground. beds received in early spring $\frac{3}{4}$ -oz. of sulphate of potash to each square yard of ground. When the plants began to grow I top dressed with Peruvian Guano 2-oz, to the square yard, and when the plants began to bud \(\frac{1}{2}\)-oz. of nitrate of soda per square yard was applied as a top dressing. addition to all this liquid applications of a well known manure were given. This was what might be termed doing the plants well. The resulting growth was interesting. Section I I had the most enormously developed foliage of a beautifully firm character, most noticeable on such varieties Madame Constant Soupert, Harry Kirk, Mrs. Myles Kennedy and Lady Roberts. Buds looked promising, but the blooms!! I feel that the less said about them the better. Every Mrs. Myles Kennedy came with a split centre. Even Innocente Pirola, whose centre is usually above reproach, belied its reputation. Molly Sharman Crawford and Mrs Herbert Stevens were useless and did not give me a single bloom worth staging. Lady Roberts, Harry Kirk and Mme. Constant Soupert produced in the two former cases thin and colourless blooms, and in the latter blooms that would not open properly even with the most careful shading.

In Section O the varieties grown were Mrs. Foley Hobbs (the Queen of Roses), W. R. Smith, White Maman Cochet, Mrs. Hubert Taylor, Souvenir de Pierre Notting, Comtesse de Nadaillac. The first-named grew to perfection. At one Show, on July 8th, held at Weybridge, I staged altogether 18 blooms of Mrs. Foley Hobbs; amongst them were two medal blooms, and 14 of these were cut from six half-standards grown on one of the Sections O, the other four blooms coming off three maiden plants. My plans for 1915 are not to be of an experimental nature, and my inclinations turn strongly towards the organic manures, applied properly and at the right time.

In bone meal and $\frac{1}{2}$ or $\frac{1}{4}$ inch bones we get an enduring and lasting source of phosphate supplies; in wood ashes all the potash we require at a very cheap rate; and in the best bullock yard manure we get an amount of humus into our light soil which can be supplied by no chemical or artificial manures. But may I, before closing, emphasise what in my opinion is the one great essential to the successful culture of the Queen of Flowers, and that is the unremitting use of the hoe.

LIGHT SOILS.

By W. DALLIMORE.

The cultivation of Roses on light, sandy soils presents difficulties which are unknown to Rosarians whose gardens are situated upon deep, rich and moderately heavy loam, such as is found in many parts of Essex, and one of those

difficulties is the application of manures which not only act as immediate stimulants, but are permanently useful in checking undue evaporation from the soil, and in forming humus.

There are many manures that can be used for Roses, but after considerable experience I have come to the conclusion that there is nothing to equal good farmyard manure --cow manure for preference-with half-decayed leaves for light soils. Well-decayed manure and leaves should be mixed with the soil in the initial preparation of the beds, and in the May following the planting a mulch of leaves and decayed cow manure can be given with advantage. This manure should remain on the ground until the following spring, and be lightly forked into the ground about the end of March. About the middle of March all established plants are benefited by an application of liquid cow manure, an application which may be repeated towards the end of June. Each year, in May in the case of dwarf varieties and after pruning where masses of rambling kinds are concerned, a surface dressing of manure and leaves, or the former alone, should be provided, and this should be allowed to remain on the surface until the following March, when it should be forked in with a little fresh lime, if the soil appears to be deficient in that substance.

When good farmyard manure cannot be procured, use may be made of bone meal sown over the surface of the ground previous to forking over in spring, and a mulch of decayed leaves may be given in May. In the absence of liquid farmyard manure, fish manure may be dissolved in water and applied during March and June. The advantage of dissolving this manure before application is noticeable in the fact that the disagreeable odour passes off more rapidly than when it is applied in a dry state. Refuse, such as is collected in garden rot heaps, has been tried as a substitute for farmyard manure, but the results have not been altogether satisfactory, neither has a surface dressing of short grass from lawns been found to make a good substitute for decayed leaves or manure.

GRAVEL SOIL (Thames Valley).

By the Rev. J. B. SHACKLE, Vice-President N.R.S.

The subject of manures ought to be full of interest to Rose growers generally and especially to the young exhibitor. All Roses and all soils do not by any means demand the same treatment, and there is plenty of room for differences of opinion. In the course of years the keen and observant gardener finds out by actual experience what is best in his own case. Here we have to deal with a soil that is very hungry and full of stones. I have found it quite beyond my powers to grow good H.P.'s, but with liberal feeding most Teas and some H.T.'s do fairly well.

In making the beds we take out the soil to a depth of two or three feet and, with the exception of that found within a few inches from the surface, we wheel it right away. Then, as cow manure cannot be obtained, we put a thick layer of London stable manure at the bottom of the bed for the sake of conserving moisture, and fill up with the best soil we can procure, usually road scrapings and turf edgings. With this we mix a liberal amount of basic slag. In February and again in April we give a light dressing of some good combined artificial containing nitrogen, phosphate and potash, and thoroughly work it in with the hoe. As soon as warm weather comes, usually some time in May, we mulch the beds with peat moss litter or very short decomposed farmyard manure. When buds are formed we begin using weak liquid manure and try to get round all exhibition plants at least once in each week. Early in the morning before anyone is about, my assistant makes use of the overflow water from a cesspool, and in the evening, as more convenient, we put on

artificial liquid. The soil is so hungry and porous that, provided the doses are not too strong, it is, I believe, almost impossible to give the plants too much. In saying this I am speaking generally, as it is well known that some Roses such as La France, Florence Pemberton, M adame Constant Soupert, and others, do better on a more frugal diet.

The most successful small lot of Roses I have known were grown by a groom whose little piece of ground adjoined a farmyard. In this farmyard there was a beautiful pool of rich dark brown liquid-a pool on which I have often cast a covetous eye. The natural soil was not especially good for Roses, but with frequent assistance from the pool the plants flourished amazingly, and even Mildred Grant grew into a respectable bush. For some years after leaving school, the occupier of this favourably situated piece of ground had worked in a garden where Roses received some attention, and there he acquired a taste for exhibiting. Considering the small number of plants grown, I think it was under two hundred, he was wonderfully successful. On one occasion he went to a local Show and carried off everything open to him in the way of cups and first prizes, but was not allowed to have them until inquiries had been made, as the judges said he must be a professional. believe his success was almost entirely due to the constant use of liquid manure from the farmyard. Growers who are blessed with a good strong loam would probably find such liberal treatment altogether wrong, but with poor ground largely composed of stones, my experience is that any quantity of weak liquid manure may be safely used. It is hardly necessary to say that only established plants in good health can digest so rich a diet.

Of course liberal feeding makes a great demand on the chalk of the soil, and when using much manure the grower must be careful to see that there is sufficient lime or chalk in the soil. In my garden there is little or no 'ime, as may be plainly seen by the way in which rhododendrons flourish, and we have to supply

it freely. A rough test can be made by taking samples of soil from the beds, mixing them together, then putting a small sample in a glass and pouring on some muriatic acid. If it bubbles freely it shows that there is sufficient lime, but if it refuses to bubble a dressing of chalk or lime is absolutely necessary. Small chalk at the rate of three or four tons to the acre is a safe dressing and, if done thoroughly, will last a long time. When using liquid manure, the addition of gypsum is a wise precaution. No matter how good a soil may be, or how freely supplied with manure, it must be constantly hoed to let in air, keep the ground healthy, and encourage nitrification. Thorough cultivation is a most important means of providing plant food.

MANURING IN ITS RELATION TO DISEASE.

By "TORBAY."

One of the principal causes for the rapid increase of diseases is the foolish and totally unnecessary fashion, now happily disappearing, of covering or mulching the beds summer and winter with farmyard and other organic manure. This applies particularly so to the months of winter, when spores which have fallen or been washed to the ground are comfortably housed, according to their elementary ideas, for the winter in the lighter straw of the manure, while the ground cannot be sweetened by the action of frost. If protection is needed the more tender Roses can be earthed up round their lower branches; but this should be done with fresh soil which has not been taken from old Rose beds or from the vicinity of the briar stock plantations, and then it should have a dose of Formaldehyde to wipe out any wireworms, and as a protection against parasitic fungi. A good

dusting of superphosphates, as well as magnesia, well hoed in, is also of considerable value in the spring. If the ground is covered it cannot have a soil-fumigant dug in for the destruction of underground larvæ, beetles, and mature insects, nor be thoroughly sprayed with cupram, arsenate of lead, or Bordeaux Mixture, for the extermination of eggs, grubs and caterpillars, as well as for the destruction of the spores of fungoid diseases as they commence activity in the spring. Summer mulching is also objectionable, and the writer is convinced that the rapid increase in the hordes of parasitic enemies, both zoological and cryptogamic, is largely due to this practice. The ground should be exposed to the highly sweetening influences of sun, rain and frost, and not covered against the sharp eyes of our friends of insectivorous bird land. The writer, whose grounds lie high and exposed to winds from every quarter of the compass, with the possible exception of the east, and moreover is on an exceptionally heavy clay subsoil, is particularly free from enemies; and he enjoys this immunity for the reasons which can be summarised thus:---

- 1. No mulchings, either summer or winter; for the former constant hoeing is substituted, and for the latter earthing up when necessary.
- 2. Thorough and regular dippings and sprayings of non-corrosive bactericidal solutions, as Cyllin and Formaldehyde, from late March to November. Quassia is unnecessary. For dipping a basin filled with the prepared liquid is used and the higher parts of the plants and young shoots dipped in it.
- 3. The entire plant and the surrounding soil are sprayed properly at each operation, especially from August to October.
- 4. Lead arsenate sprays are used from November to May, and more particularly from March to May, on ground and foliage.

- 5. Bordeaux Mixture is sprayed on the leafless trees as well as on the ground once monthly from November to February or early March. Cupram is also employed occasionally in lieu of the Bordeaux Mixture, and especially at the close of winter.
- 6. A dressing of basic slag in late autumn, or one of superphosphates in February, is well hoed in. In addition a dose of magnesia in March, and one of slaked lime (water, not air slaked) in February once every third or fourth year, is gently hoed in.
- 7. A dressing of farmyard manure, immediately hoed in, is given every second spring, as an excess of nitrogenous manure, owing to too rank growth of foliage and wood, encourages the enemy.
- 8. A soil fungicide dug into the soil once or twice a year in late autumn or April for the destruction of grubs and germinating spores. One or more holes can be made near the roots of the trees, and carbon bisulphide or Formaldehyde can be dropped into this, then refilling the holes with earth; or, as a change, use a compound naphthaline powder.
- 8. No manure, organic or inorganic, after the middle of July, as otherwise quick acting manures, and especially nitrogenous ones, would tend to form young and immature growths, increasing any susceptibility towards disease.
- 9. An open situation, and a friendly attitude displayed towards feathered guests.
- 10. Other plants cultivated with the Roses, as it is found that too many of one kind of plant crowded together increases their susceptibility to disease.
- 11. Very high treatment and rich feeding, so essential for Exhibition, is not attempted here.

- 12. No coddling of any description from January to January.
- 13. No great excess of water; and no water is given straight from the tap in large quantities to chill the warm roots.
- 14. Under glass: morning ventilation by the top ventilators, but adequate protection against cold draughts.

ROSE MANURING.

By RICHARD WOOSNAM, F.I.C., F.C.S.

The literal meaning of the word "manure" is "hand work," and it was originally used in this sense. It described the manual operations carried out on the land. Put in another way, to "manure" signified to "cultivate." At the present time to manure means "to enrich the land with any fertilising substance." This is quite another thing, and of the two I prefer the older meaning; it is by far the more important. To add fertilising substances to land that lacks cultivation is not only useless but it is probably harmful, whereas the withholding of fertilisers from a thoroughly well tilled soil is not such a serious matter.

Good cultivation in the case of Rose beds implies deep digging at the start—three feet is to be preferred, and constant hoeing afterwards. Thorough and deep digging, if plenty of garden refuse is incorporated with the bottom section of the ground moved, insures a good drainage, and upon that depends the proper aeration of the soil.



THE REV. J. B. SHACKLE, VICE-PRESIDENT, 1914.

With good drainage, every shower of rain that falls upon the land draws in the air after it as it percolates through. This has a far-reaching effect. It more or less rapidly decomposes and disintegrates organic and inorganic substances in the soil, unlocking and rendering available for plant food the supplies lying there. A further benefit derived from good drainage is the fact that the temperature is raised, thereby increasing the activity of the millions of microorganisms with which the soil teems. Good cultivation therefore increases the fertility of the land, and properly carried out is equivalent to a good dressing of fertiliser. This is manuring in the old sense. In my opinion it is the most important of all methods of increasing the yield of a soil, and without it added manures are wasteful and of doubtful benefit. In fact, where there is insufficient aeration due to bad drainage, nitrogenous substances are decomposed and putrifactive changes take place which are distinctly deleterious.

Taking it for granted then that the Rose beds have been thoroughly and deeply dug, it no doubt becomes desirable sooner or later to add to them something in the shape of a fertiliser. To do this successfully and economically it is necessary to ascertain in what essentials the soil is poor. Roses are greedy feeders and quickly impoverish the land, and apart from this the nature and composition of all soil varies according to its formation. For instance, a clay soil contains a larger proportion of plant food, and is able to retain any additions to it better than a sandy soil. This is to a great extent due to the colloid bodies it contains, important factors, since they absorb and retain the soluble salts for the use of the plants.

The object of manuring is to supply in an assimilable form those essentials which, from constant cropping or from inherent deficiency, are lacking. It must be understood that a soil may contain a large amount of plant food, but so combined that it is of little use to the Roses. For plants to be able to absorb nourishment it must be in solution,

or at least in such a state that the weak acids contained in the rootlets can readily render it so. At the present day it is usual in estimating the degree of fertility of a soil to ascertain the amounts of the various plant foods that are soluble in a one per cent. solution of citric acid. This is a rough imitation of the plant action taking place in the soil, and is found to give valuable information. Approximately only the substances dissolved by this very weak acid solution are in a condition to be assimilated by the plant, and any ascertained deficiency can therefore safely and with advantage be made up by the application of one or more of the usual mineral or organic fertilisers.

Some years ago, attempts were made to ascertain by analysis of the ash of Rose plants what was really best for them in the way of manure. However, from the fact that the roots of plants have no power of discrimination but absorb whatever is dissolved in the soil water, it follows that the constituents of the ash vary very considerably. Calculations based on the result of the ash estimations for this reason are misleading.

Most of the essential elements of plant food are present in sufficient quantity in nearly all soils. The most frequently added are phosphoric acid, potash and nitrogen variously combined. Roughly and without going deeply into the matter, the effect of these is as follows:—

Phosphoric acid encourages bloom and increases the size and strength.

Potash promotes quality of bloom and assists the ripening of the wood. It has also been suggested that it enhances the perfume.

Nitrogen increases the formation of leaf and a vigorous growth.

Of these three, phosphoric acid is the most important for Roses. It is well to remember also that farmyard dung is poor in this particular and that it is necessary to supplement it with a more concentrated phosphatic manure. Potash on the other hand is supplied in sufficient quantity where dung is applied. Nitrogenous manures are rather treacherous for Roses, as one is liable to get a lot of sappy growth at the expense of bloom.

In addition to phosphoric acid, potash and nitrogen, there is another very important essential, namely lime. The application of lime seems to be rather a rarity with Rose growers, except when it is given in combination with phosphoric acid as bones, basic slag, superphosphate, etc. This is rather surprising, as particularly with frequent dunging the supply of lime rapidly diminishes. It is, in my opinion, probably to a great extent due to lack of lime that soils become Rose-sick. I do not say that an application of lime will at once remedy the malady, but I believe that if the proper proportion of lime necessary in a soil were kept up, there would be far less complaint on this score.

The value of lime as a manure is largely an indirect one. Its influence on plant life is enormous, by reason of its effect in the soil in many ways. It neutralises the acids in what is called a "sour" soil. It fixes the potash and ammonia, preventing their being washed away. It helps to break down humus and disintegrates many insoluble mineral bodies, forming instead soluble forms of plant food. A proper proportion of lime in the soil assists the development and increases the activity of the nitrifying bacteria so essential to fertility. Lime occurs in the soil chiefly as carbonate (chalk), and it is in this form that it is of the greatest service. It is best applied at the end of the autumn in the form of chalk, using 2-lb. or 3-lb. to the square yard, well hoed in.

The backbone of Rose manuring has always been good animal dung. Cow dung is generally preferred when obtainable, but most people have to fall back on the ordinary well-rotted product of the stable. In either case the addition of dung to the soil is the simplest and best means of providing

the necessary humus. As before pointed out it is comparatively poor in phosphoric acid, and this must not be lost sight of. It is most valuable when liberally mixed in with the lower spit when making the Rose beds. Personally I prefer to have it a full foot below the surface. There need be no fear that the Rose roots will not get to it. The quality and value of dung depends entirely on how it has been made—over-heated, rain washed stuff has probably lost more than half its virtue. It may be added that well-made dung has in addition a very beneficial mechanical effect on the soil.

It is impossible in a short article to go through the whole of the many fertilizers now used, and I will therefore suggest only one other, viz., basic slag. This is a byproduct of the manufacture of steel, and was for many years considered useless. It contains a particular form of phosphate of lime and its value is in proportion to the fineness to which it is ground. It should be bought with a guarantee that a minimum of 70 to 75 per cent, will pass through a sieve of 10,000 meshes to the square inch. Thus finely ground, basic slag is an excellent manure. It is slow in action and should be applied in the autumn. Owing to the large proportion of lime it contains the soil will not become deficient in this essential. It is of value on all varieties of soil and it is practically impossible to give an overdose. A liberal dressing may he given to the lower spit when making the beds, and also annual top dressings of 4-oz. or 5-oz. per square yard, well hoed in, afterwards.

Perhaps I should not leave the subject without saying something about the manuring of Roses during the season of growth. Many people, in my opinion, ruin their Roses by overdoing this, often being in complete ignorance of the properties of the mixtures they apply. I believe that the safest plan for most people is the best, and that the old-fashioned way of giving a weak liquid prepared by steeping cow manure and soot is as efficacious as most. Weak and often is the golden rule.

Of course different soils require rather different treatment, but the foregoing remarks apply to most of them. Special stress must be laid on the preparation of the soil in the first instance, as so much depends on a proper start. The complete interdependence of manures and cultivation cannot be too fully realized.

Finally, the following points are of prime importance for successful Rose growing:—Deep digging, dung in its proper place, liming whenever necessary, top dressing and constant hoeing.

SUMMARY.

By Dr. A. H. WILLIAMS, Vice-President, N.R.S.

We have here eight excellent articles which attack this subject from different aspects and for different conditions.

With curious unanimity nearly all of the writers emphasize the importance of practising manuring under its original meaning—that is hand working of the soil, and all Rose growers will agree that without working of the soil the application of the best and most efficient foods, whether natural or chemical, is waste of material.

The next point of interest is the unanimity with which our writers agree in recommending a mixed diet or changes of diet. We have Mr. Orpen, who works on the Essex clay soil, recommending sprats, pig manure, horse manure, the contents of the cesspool, superphosphate, sodium nitrate, and last, but perhaps most important of all after such a heavy diet on such a retentive soil, chalk or lime to keep things sweet.

Then Dr. Lamplough, with a slightly lighter soil, gives us cow manure, superphosphate, sulphate of ammonia and frequent applications of liquid manure.

Mr. Slaughter, writing from a light soil on chalk, gives also a mixed diet. He makes a special point of bullock manure and liquid manure from the cow-stall cesspool.

Mr. Sawday, also writing from a very light soil containing lime, likewise commends bullock manure on the ground that the material obtained from the up-to-date cowshed is likely to be contaminated with Board of Agriculture disinfectants. He recommends in addition bone meal and wood ashes, with copious waterings and applications of liquid manure throughout the season to counteract the dryness of the soil.

Mr. Dallimore, also from a sandy soil, recommends cow manure and decayed leaves with bone meal, and twice a year good applications of liquid manure, either liquid cow manure or dissolved fish manure. He makes up for the infrequency of his applications of liquid manure by covering the beds with a mulch of decayed cow manure and leaves.

Then Mr. Shackle, who rejoices in a hungry soil composed of sand, gravel and stones, with no lime, tells us how he manages to get those beautiful Roses from such unpromising material. He puts a good base of cow manure at the bottom of the bed, then helps his soil, or rather makes it, by adding to what he has got any odd bits of road scrapings and turf edgings, fortified with a little basic slag. He gives top dressings of composite artificial manure in February and April, and then in May he covers the beds with a mulch of moss litter or decayed stable manure. After this once a week throughout the season he gives liquid manure either from cesspool, manure pool or made of dissolved artificial His principle is much watering, with many manure. applications of weak liquid manure. And he uses dressings of chalk to keep the soil sweet.

The interest in these articles taken in this order is that we have a gradation from the rich, heavy clay loam of Colchester to the hungry stones and sand of Maidenhead. And we find that all recommend a very varied and mixed diet; all insist on tilth, tilth, tilth. But as we get to the lighter soils we find more insistence on precautions for conserving the moisture or adding it to the soil. At the same time one gathers that whilst on heavy soils the heavy feeding has to be done with very careful precautions for keeping the soil from becoming gross or sour. On the lighter soils the heavy feeding may not only be pushed to almost any extent, but is evidently a necessity if Roses of any quality are to be produced.

There are still two articles to which I have not drawn attention That under the name of "Torbay" deals with the matter from an entirely different point of view, and is not so much an article on manuring, but is rather on the destruction of pests with certain hints as to the use of manures with this object.

The last article on the list, by Mr. Woosnam, is written by a Rose grower who is also evidently an observant and practical chemist. It contains many interesting and useful scientific explanations, but they are all put so simply that few of us can fail to follow them. Mr. Woosnam explains how the Rose takes its food, what special constituents are required, and how these special constituents can be added to the soil. He explains why some soils retain their sustaining properties longer than others. In fact the whole article teems with scientific and practical explanations and hints. It will help our readers to understand why the other writers have recommended what they have done.



Municipal Rose Gardens.

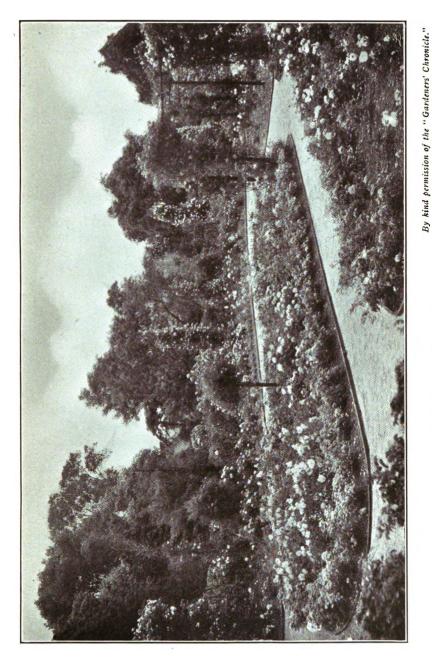
By WALTER EASLEA.

At the risk of appearing over sanguine I may say that, in my opinion, every municipality that can maintain a public park will, in the near future, also possess its public Rose garden. My belief arises from what I have seen regarding the Public Rose Garden at Westcliff-on-Sea, of which I shall speak further on.

No one can deny the immense popularity of our national flower, but alas, many thousands of the inhabitants of the British Isles possess such meagre gardens, or maybe none at all, that their love of the Rose is at present limited to what they may see in others gardens or at the Exhibitions.

Probably the carnation or chrysanthemum enthusiast will ask "Why not a municipal garden for their special flower?" My reply to that would be that the Rose is our national flower, and as such must be accorded the pre-eminence. Moreover, is there any hardy plant of which we could make an exclusive garden that can compete with the modern Rose? And the establishment in every suitable locality of a public Rose garden would afford pleasure and instruction to multitudes.

I say instruction, because I can conceive of nothing more helpful to a would - be Rose grower than to visit the public Rose garden of his own district and obtain lessons in preparing the soil, planting, pruning, and cultivating the Roses and selecting the varieties that he likes best, which he can see flourishing, and thus gain more useful information by a few visits than he would from the perusal of dozens of books, with all due apologies to their able writers.



PUBLIC ROSE GARDEN, WESTCLIFF-ON-SEA.

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When such gardens are well established the National Rose Society might be able to use some as trial grounds for novelties, but of course that is merely a suggestion.

I am sure there can be no better agency for the popularising of a good novelty than a public Rose garden. When American Pillar was first introduced, realising its value, I presented a specimen of this Rose to the Public Rose Garden at Westcliff-on-Sea, and from my own knowledge that plant was the means of inducing scores of people to plant this variety, people who would never think of going to a Rose Show or study a catalogue. From the illustration opposite page 88, one may gather an idea of the beauty of such a specimen, which also displays the cultural skill accorded the Rose by the able Superintendent, Mr. Little.

Another useful purpose to which public Rose gardens could be put would be the possibility of utilising them for teaching the rising generation the art of Rose growing, a fact not to be ignored by educational authorities, for if children be given a healthy love of the beautiful, and especially for their national flower, who can limit its farreaching results?

At present I believe we are far behind America as regards public Rose gardens. In some districts they are being established upon a very lavish scale. The City of Seattle, I have been told, is like one vast Rose garden, and the authorities spend large sums to maintain their upkeep. The American Rose Society have a Test Garden at Elizabeth Park, Hartford, Conn. It is owned by the City of Hartford, and all the work connected with it is under the supervision of the park gardener. It is laid out in fine style, enclosed by hedges of Roses, and contains a Rose temple. Thousands of people visit this garden in the month of June.

I was much struck by the interest taken in the Roses in the Public Park at Lyons, a city that abounds in Rose nurseries, and here one could find some rare old sorts that are now almost forgotten by us; sorts that probably are not even grown by the French nurserymen of the present day.

At our own beautiful Kew Gardens the Roses always attract large numbers of visitors, but I have often thought it a mistake that the Roses are not located together in a well-designed Rosery, rather than scattered about the gardens as is now the case.

I believe there is a plantation of Roses at Purley that the public have access to, and there may be others in other parts of the kingdom, but certainly the best public Rose garden I have met with is at Westcliff-on-Sea, founded by the Corporation of Southend-on-Sea.

A full description of this Rose garden appeared in the "Gardeners' Chronicle," August 29th of last year, and I am indebted to the Editor for the use of two photographs which appear herewith. It forms a part of the pleasure grounds attached to Chalkwell Hall, a property of some 26 acres, which the Corporation acquired in 1903 for the sum of £20,000.

The Rose garden, planted in 1908, is about half-an-acre in extent. It contains nearly 2,000 plants—tall pillars, weepers, standards, bushes and hedges, and comprises all the best and up-to-date varieties. On Sundays and special days during June, July and August the garden is crowded with residents and visitors, and note books are as plentiful as at Vincent Square. All the Roses are carefully labelled with Acme labels. The luxuriant growth is a wonder to behold, and when in a good soil, such as abounds all over the district, it would appear that Roses revel in the sea air, which is manifest from the ripe condition of the wood.

It may be thought that war time is hardly a fitting moment for introducing the subject of public Rose gardens, but surely no harm can be done if the suggestion finds favour with local authorities, and I would ask all local secretaries to use their influence towards establishing such gardens in their own districts, and perhaps in some places the conclusion of peace, when it comes, might be celebrated by the establishment of a public Rose garden.

Public Rose gardens should be easy of access, although in crowded districts it would be advisable to plant in the suburbs. If land is very expensive a smaller area than half-an-acre might suffice, but I do not advise much less. Of course in many localities the land is already in the possession of the authorities, and the site could be obtained in many cases either by enclosing a plot of the grass land, or it may be by discarding some shrubberies, as in the case of part of Chalkwell Park.

With all due respect to surveyors, I would strongly advise that the details be left to a committee of Rose growers, and local secretaries might help in forming such committees. At Chalkwell Park the authorities had the advice of Alderman Martin, a Rose grower of local renown, and in practically every district there may be found gentlemen well qualified to advise as regards site, preparation and selecting the varieties.

I would suggest that the National Rose Society should approach the authorities of the principal boroughs in the United Kingdom and, where possible, name a local gentleman qualified to advise. Our Society would certainly benefit from such co-operation, and probably would be able to find situations for experts as superintendents, a list of whom could be readily obtained if the matter were taken up by the National Rose Society.

I would suggest that such superintendents be made honorary members of the National Rose Society, and no doubt through their efforts literature and other details favourable to the National Rose Society could be disseminated.

Friendly rivalry could be encouraged by offering cups or medals for the best designed Rose garden, and also for the one best cared for. In many localities the local Rose Show could be held close by the Rose garden, and thus afford the public an additional pleasure. Data relating to varieties best suited to each locality and other details would be of the utmost value to all who study the Rose and its culture.

In conclusion, I have just a word to say as regards our public parks in London and other large cities, where the conditions are not favourable to Rose growing.

I would suggest that a Rose garden be laid out, the beds being filled with bulbs for the spring and then with Roses for the summer. Plants from the open ground potted up into eight-inch pots in October will yield grand blossom the following summer. The plants could be grown in pits and brought on ready for plunging in the beds in June, and removed again in late autumn.

This is done already in some parks, but instead of locating the beds here and there, if arranged altogether the effect would be better, and the public instructed thereby as to grouping and other details. It is a simple matter to grow ramblers, weepers, and standards in tubs, and surely they deserve as much time and trouble as many of the subjects we find in our public parks during the summer. At least they would be far more natural than exotic things such as palms and castor oil plants.

I hope from the wide publicity of this publication that the authorities concerned in establishing garden cities will bear in mind the suggestion of forming a public Rose garden. With them it would not be so arduous as in old established boroughs where land is difficult to secure, but it may be some public spirited residents of even such boroughs as last mentioned may see their way to offer sites for establishing a public Rose garden, and thus help to create an even greater love for our national flower.



By kind permission of the "Gardeners' Chronicle,"

MUNICIPAL ROSE GARDENS.

By HERBERT L. WETTERN.

The Council of the National Rose Society recently had under consideration a recommendation from its Publications Committee to the following effect:—"That overtures be made to Hertford, Croydon and Reading with a view to Roses being grown in the public gardens there, and the results reported to the Publications Committee." The recommendation was "referred back" after a short discussion, it being thought that the expense would be too great for the Society to embark upon with its limited resources dependent on a small subscription, which is almost nominal.

Perhaps the proposal was not very definitely expounded, and the impression was that the Society was contemplating the establishment of its own Rose gardens, to be used also for experimental work, on the same lines as the Royal Horticultural Society's garden at Wisley.

To construct, plant and maintain a national Rose garden on the scale of Wisley would certainly necessitate a very considerable expenditure, both in the initial cost and annual upkeep, which our Society could not entertain unless the annual subscription were doubled or trebled.

By a general co-operation of the Society as a body, its members individually, the trade growers, and the Municipal Councils of some of our Boroughs, the whole project could be carried out with no loss, but in all probability would result in a very big gain to our Society through the influx of new members.

If Rose gardens or Roseries are established in public parks and pleasure grounds, where the public can wander

at their own sweet will to study and enjoy their own Roses, surely our Society is doing a good work and benefiting itself in the long run.

Watching the Roses would awaken the interest of the classes and masses, create ambitions, lure them on to growing Roses themselves, and joining our Society almost as a matter of course.

One public Rose garden has been formed at Westcliffon-Sea, and Mr. Easlea says that it is quite a sight, especially on Saturdays and Sundays, to see the procession of people making for it when any Roses are in bloom.

In the garden suburb of Purley, where amateur horticulturists abound, the well-known Rose Walk, which was described in the "Rose Annual" a few years ago, is more popular than ever, judging by the streams of people who throng it all through the summer. There is little doubt that the far-seeing landowner of the district, who is a generous supporter of all local horticultural societies, has reaped, and is reaping, his due reward in good prices for his building plots, thanks, in a measure, to his Rose Walk advertisement, and well he deserves his success. That this Rose Walk has also benefited our Society can easily be proved by the extraordinary number of members hailing from Purley and that neighbourhood.

Such, then, are the benefits to our Society and the advantages to the public; but how can they be secured and without cost? Following the example of London and the bigger towns, Municipal Corporations are very wisely keeping a watchful eye on future "lungs" in the shape of parks, recreation grounds and playing fields, and in almost any one of them a piece of ground could be spared for a "Rosery," where beds of Roses, arches, hedges, pergolas and all or any of the other beautiful uses of Roses could be indulged in. There is little doubt that if such Councils were approached with a view to establishing Rose gardens under the guiding care of our Society they would welcome the suggestion.

The formation of the Rosery must be carried out by the Municipal Council, who must also bear the cost of upkeep; but considering that gardeners are always kept at these public gardens and manure is lavishly used on the flower borders, no additional expense need be entailed.

The Roses—where are they to come from? Perhaps generous donors would present them if the Municipal Council would not be inclined to spend a little less money every year on scarlet geraniums at 3s. per dozen, and a little more money on Rose plants at 9s. per dozen, which latter would not be an annual expense.

But surely the great Rose growers can be trusted largely to stock the Rosery?

Would not the great Rose firms of Cants, Dicksons, Prince and Prior give, with pleasure, a bed of Roses each in return for a perpetual advertisement in the shape of a neat and unobtrusive label that "The Roses in this bed have been presented by Messrs. ———."

No extra cost, then, will be thrown on our Society, but its co-operation is essential to secure success. As a body it would simply act as consultant, adviser and general help; but it must rely on its many willing Vice-Presidents, Councillors and Members to lend a hand in designing and undertaking the responsibility of superintendence. If one member would take such responsibility on his own shoulders for each public Rosery he would earn the gratitude of the Society and his fellow citizens.

He could keep a watchful eye on the Rose garden and be in touch with the Municipal Council and its gardening staff on the one hand, and our Society on the other.

That members of our Society would undertake such a small labour of love there is no shadow of doubt; give them a chance and the response of volunteers would justify it at once.

It should be a part of this duty that these members should make periodical reports to our Society as to the growth of the various Roses. Such reports of Roses growing in different climates, aspects and soils would be most valuable; and summaries of them published in the "Rose Annual" would be a guide to many amateurs "trying" new varieties.

Although possibly the Rosery might in effect be an unwitting trial ground, any idea of using it as such for testing new varieties of Roses must be studiously avoided, otherwise the proposal might be declined with thanks by the Municipal Council; and rightly so, since it is not to be expected that public parks are to be given over to trade purposes.

On the other hand new Roses, if presented, will without a doubt be accepted and tried; and the report from the local honorary Superintendent will be of the greatest value. Such are my ideas on Municipal Rose Gardens, and I look forward to them being established all over the country with a corresponding increase in the membership of our Society. In my own neighbourhood I have every hopes of inducing one of our local authorities to devote a part of one of their parks to a Rosery, even if I have to give them the Roses myself to start them off.

From my conversations with some of the local Councillors I gather that the feelers I have put out have reached fertile soil.

Having the personal acquaintance of the officials of a good many Councils in the country, I feel sure I should have the same response in other quarters provided I approach them with the passport of our Society. Increased membership must result from such seed sowing, and it is a work which should be taken up by the National Rose Society, if only to endorse its stated object, which is "to encourage the cultivation and improvement of the Rose."

"ROSE GARDENS" IN PUBLIC PARKS.

By E. F. MORGAN.

This subject is one that should interest all lovers of the Rose, and especially the National Rose Society, which has done so much to encourage and promote Rose cultivation.

Attention is drawn to the fact that the "Rose Garden" is seldom a feature or speciality in our public parks, whereas nothing could be more attractive and pleasing to the general public who frequent these otherwise well-kept and interesting grounds.

It is well known that while the necessary funds are annually provided for the purchase of spring and summer plants for the purpose of beautifying these grounds, little or nothing is expended on Roses, and where attempts have been made in this direction, the results obtained are, as a general rule, disappointing and unsatisfactory, a perfect bloom being rarely seen, while plants showing signs of decay through unskilled treatment and want of judicious cultivation are numerous.

This is due, in many cases, to the want of technical knowledge on the part of those engaged in the actual work of gardening, who are not highly paid gardeners, and do not possess the special experience required for such work.

Again, the official who acts as Superintendent may be —with his other multifarious duties—an excellent landscape gardener but not necessarily a Rosarian.

It does seem, therefore, that our Society could further enhance its good work, by intimating to those who have under their care the laying out and upkeep of public parks and gardens, their willingness to co-operate with local authorities, by assisting such authorities with advice and guidance, with a view to the extension of Rose cultivation.

It is fair to assume that such advice would be gratefully accepted and acted upon, because there would be some guarantee of success connected with it.

As one who for many years has had under his charge a large acreage of public parks and gardens, and with a very limited knowledge of Rose-growing (although a great lover of that best of flowers), I read with great interest that valuable paper in the "Rose Annual" for 1914 entitled "La Roseraie de l'Haÿ," and much envied M. Ajalbert at Malmaison, who was able to obtain and apply advice from M. Jules Gravereaux.



Roses and Disease.

By GEORGE M. TAYLOR.

Every grower of Roses, either for Exhibition or for decorative purposes in the home or garden, has to face disease of one kind or another amongst his plants. Much has been written upon the subject of remedies for the prevention and eradication of disease, and but little has been contributed upon the question of breeding Roses that are immune.

In relation to this subject we have been told that the curative branch of plant pathology is as empirical as was the medicine of pre-Pasteurian days, and the task to which we are confined is mainly to the work of preventing the spread of a disease rather than to that of its eradication. That statement may or may not be accurate, but there is ample evidence to prove that in the breeding of Roses too little attention is paid to the history and character of the parents used in this work. It is contended that eugenics is the practical application of scientific doctrines to human affairs, and in respect to the horticultural world, in at least so far as that portion which relates to Rose breeding is concerned, the present method is not in accordance with modern advanced practice in genetics.

The question of heredity is an important one in plant life, and I am inclined to believe that most of our Rose hybridists pay but scant attention to this factor except in one particular. In present day Rose breeding, so far as I am able to study it, the one idea seems to be the creation of a race of hybrids bearing flowers of certain colours which are very popular with the majority of those who cultivate Roses. The properties of the parents used in those endeavours, beyond the colour factors which they are

assumed to carry, do not seem to be considered. In the case of Roses—and the same thing applies to many other plants—the appearance of an individual is no index to its breeding potentialities, and a knowledge of its germ cells, or gametic constitution, is the only guide to its heredity, and such can only be secured by Mendelian analysis. The Mendelian analysis of any hybrid Rose has not, so far as I am aware, been worked out. In order to ascertain such an analysis long and laborious years of breeding might be expected to lie before the worker in this branch of genetics; but further criticism on this point may be deferred until more experience has been gained with this particular plant. I am quite certain of this: that several hybrid Roses when "selfed" with their own pollen reproduce themselves with but little change from seed.

My own experiments—on a somewhat limited scale at present—have given me cause for thinking that certain diseases of Roses may be controlled, to a great extent, by the breeder of new varieties. Certain Roses now in commerce are immune, or nearly so, to Mildew. Some of those sorts when "selfed" produce a set of seedlings many of which inherit the characters of the parent, and the inheritance of such characters — especially that of intense resistance to Mildew - seems to follow definite rules in reproduction. Roses extremely susceptible to mildew behave in an exactly similar manner, and the character of susceptibility also seems to follow definite rules of inheritance. Well defined rules also seem to govern the seedlings derived from certain parents, one of which is highly resistant to Mildew and the other highly susceptible to that disease. I am also convinced that in the case of Black Spot, care in the selection of parents will help to control this troublesome pest to the Rosarian. By "selfing" certain Roses I have been able to discover one or two sorts which throw a proportion of seedlings thoroughly resistant to Black Spot, and other sorts so "selfed" throw progeny every one of which fall an easy prey to this disease.

A survey, in relation to the incidence of diseases, of the various groups of Roses now in common cultivation, reveals some interesting features. The Tea Roses offer an intense degree of resistance to Mildew, Black Spot, and Orange Rust; in fact many varieties may be said to be immune. The varieties comprising the China group have a practically similar character, and so also have the majority of the dwarf Polyanthas. The Hybrid Perpetuals are very susceptible to Mildew and Orange Rust, whilst many of the Hybrid Teas-which have been evolved from them in conjunction with the Teas-reproduce the same failings. That is to say a great many of the Hybrid Teas have obtained their character of susceptibility from Hybrid Perpetual parents of a like nature. The Wichuraiana Hybrids with strong Tea blood are highly resistant to Mildew, the higher the degree of Hybrid Perpetual parentage the greater the liability to attacks of disease. The Hybrid Austrian Briars possessing a strong infusion of Persian blood are markedly susceptible to attacks of Black Spot.

Summing the matter up, the conclusion seems to be that Mendelism is destined to convert the breeding of Roses resistant to the diseases peculiar to this plant into an orderly scheme; but before this can be done a lot of work lies before the hybridist in gaining an analysis of the gametic constitution of his individuals used as parents. The mere selection of parents from a colour standpoint on the present basis will simply lead us further into the wilderness of disease.



Roses Under Glass.

By E. J. HOLLAND, Deputy President N.R.S.

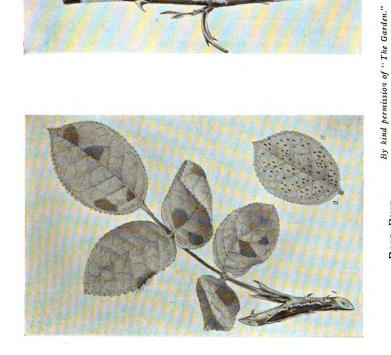
The Prevention of Mildew.

The proverb "Prevention is better than cure" has always seemed to me particularly applicable in the cultivation of Roses. Complete "prevention" may be difficult, if not impossible, but "cure" is very often a futile effort to mitigate annoying symptoms. Sometimes indeed the remedy appears to have been a greater trial to the plant than the disease.

It is common knowledge that the healthier the subject the more difficult it is for parasitic attacks to gain a foothold, or at any rate to inflict serious injury. Obviously therefore the first aim should be to provide the conditions which make for strong and sturdy growth, and to avoid those which tend to weaken and enfeeble. The next aim is, if possible, to destroy the germs of disease.

It is comparatively easy to avoid an attack of the enemy mildew provided these elementary aims govern the treatment of Roses under glass. In amplification of the first and more important aim I assume a batch of healthy plants, well-rooted in a suitable medium, properly pruned and gradually started into growth. There must be a complete absence of forcing at any stage, most particularly at early stages, and a resolute avoidance of extremes in temperature. When plants have been hurried along in excessive heat, with the inevitable consequences—spindly growths and soft foliage—they are almost bound to become a prey to mildew and aphis. No





cultural efforts are likely to restore them to passable vigour, or to secure anything like the satisfactory results which one may look for when plants have been properly treated from the start.

Top ventilation should be gradually given early in the day. To wait until the sun has rapidly taken up the temperature of the house and then to admit generous supplies of cool air for the purpose of adjusting matters is to court disaster. I generally leave one or more of the ventilators slightly open all night from the very commencement of growth, except in very severe weather. It is important to avoid draughts, therefore one must watch the direction of the wind, and open ventilators accordingly. When conditions are favourable, a still, warm day, for instance, give the maximum of top ventilation. I never use side ventilators.

When in growth the foliage should be lightly sprayed with water from a syringe, but not when the sun is full on the house. The water used for this purpose should always be of the same temperature as the house.

This is rather a long preface to something the Editor has asked me to write about—the use of lime and sulphur on the hot water pipes of the greenhouse; but I have purposely emphasised what is frequently in danger of being overlooked, that attention to cultural details is vastly preferable to reliance upon remedies or antidotes, though in this case there is no doubt that the use of sulphur in the way indicated is most valuable as a preventive of mildew. Indeed, for several successive seasons I have never seen a trace of mildew on my pot Roses until long after the flowering period.

Immediately after the Roses are pruned I have arranged for not only the hot water pipes, but also the walls of the house under the benches, to be painted over with a wash containing sulphur. The wash is easily prepared. Two or three lumps of quicklime are placed in a pail of water, and

a couple of pounds of flowers of sulphur well mixed in with it. Apart from its cleansing properties the lime assists in making the mixture adhesive. The sulphur is the real agent. When the pipes are warm, mild fumes, which one can readily detect on entering the house, are steadily given off. The house is, in fact, sterilised, and unless there is flagrant mismanagement as regards heating or ventilation, on which I have already dwelt, mildew is very unlikely to appear.

I am informed that the fumes have in some instances been found to damage tender foliage. Personally I have never detected more than the merest suspicion of trouble in this respect, probably because my practice has always been to use the wash early, so that any excess in the fumes given off from the sulphur is exhausted before the plants break into growth, and also because I am strongly against excessive heating of the pipes. If the operation is delayed until the Roses are in growth, then it will be advisable to treat only a short length of pipe—say a yard or so—on each side of the house, and so minimise the risk of injury. But it is most unwise to wait until signs of mildew appear, and I recommend adoption of the plan which has proved safe and efficacious in practice.



Black Spot (Actinonema rosæ) and Mildew (Sphaerotheca pannosa)

By THOS. N. COOK (Boston, U.S.A.).

The contributions on these subjects in the 1914 Annual are of great interest, as they are the two important parasites we have to contend with in the Northern United States.

Dr. Hamilton's contribution is especially valuable, and should be carefully read by all who have a Rose garden, bearing especially in mind the particular lettered paragraphs on page 104, which are in short:

- (a) Aphides and Scale Insects make slight punctures both in leaf and stem.
- (b) Good drainage and intelligent cultivation.
- (c) Overcrowding, growing a few plants well.
- (d) Vigilance, anticipating attacks of the insects and fungi by early washing and spraying.

For Black Spot and Mildew we have had good success with Bordeaux Mixture, spraying in late fall, after the first frost both the plants and the soil with half-strength solution (generally about October 20th with us); then again in mid-December, when the ground is frozen hard and the plants thoroughly dormant, with the full strength solution. In early March another spraying with the full strength; after which we remove the earth protection as early in April as the weather permits. We use a very weak solution before the

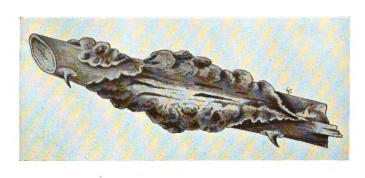
buds move. Sometimes in May after a cool foggy night we may see here and there a slight attack of Mildew, which we have promptly met with a very weak solution of Bordeaux and put up with the stains. With this system we have had absolutely no Black Spot or Mildew that in any way disfigured the plants. Late in August we found another visitor—Scale—which caused us to try Burgundian Solution, and will make that attack another part of this contribution.

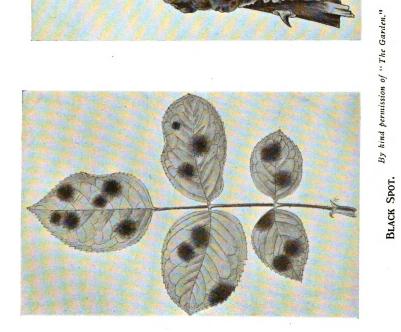
As a preventive to Black Spot special attention must be applied in pruning. Be sure when pruning dwarf plants in the spring that the centres are open to the sun and air, and observe closely the general rules; then in July, after the first period of bloom see that the centres are open low down and prune out all small growth about the base of the plant and keep it clean for the rest of the season, so that there may be no breeding places and that the spray reach all parts of the plants.

When in England the writer was very much interested in the Lyons Rose, and the reports regarding its liability to Black Spot. This Rose had, at that time, furnished us with our only experience in growing the Pernetiana group, and we were somewhat surprised at this report. Our plants, now four years in our South Garden, have flowered finely and furnished much better blooms than were to be seen at the English Shows, and we have never seen either Mildew or Black Spot on them. Our clearer atmosphere in the summer may account for this.

In the fall of 1913 we had planted a few plants of several varieties of the Pernetiana group in our trial garden, and we discovered the last week in August what appeared to be Black Spot, and some fifteen plants badly affected. A close examination showed on the spots a few cream-coloured fine dots, which under the microscope proved to be Scale (diapsis rosea), but none of the radiating filaments of Black Spot. This Scale was also on the old wood that had flowered while the writer was in England, and a few were found on the newer growth. We pruned out this old growth and

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sprayed with the Burgundian Mixture three times in ten days, cleaned up all the fallen leaves and burnt them. The plants now (December 1st) seem clean and healthy, and will be watched closely all winter—these plants are in the North Garden, plenty of sun but no protection from the north-east wind. Our only other experience with Scale was two years ago on the leaves and stems of Maman Cochet. That attack was controlled with an Ivory Soap wash. It did not appear last year, but we found this year three leaves affected on ten plants, and the Burgundian Solution cleaned them up so that they flowered finely up to frost (October 20th).

Burgundian Mixture (Bouille Bourguignonne) is recommended by M. Cochet-Cochet in Journal des Roses, March and April, 1912; also in "Les Rosiers" by Cochet-Cochet and S. Mottet, with a further suggestion to add sugar or treacle. We like it better than Bordeaux, as it is so easily made and does not stain so much and seems so far to be effective.

In August I ordered fifty Rose plants grafted on Manetti, and planted them in the greenhouse. Within three days we had Black Spot and had to spray all the other plants. We used the Burgundian Mixture twice, and the Spot did not spread to the other plants. All the plants have been clean to date (December 1st).

For a formula we use $5\frac{1}{2}$ ounces sulphate of copper put in a small piece of sacking, tied in bag form and suspended in two gallons of water, using any wooden receptable that will hold five gallons. Arrange the bag so that it will hang just beneath the surface of the water. Next dissolve $4\frac{1}{4}$ ounces carbonate of soda in two gallons of water in another pail. When the copper has all dissolved, pour into it, slowly

¹ Note. — The French formula for Burgundian Mixture (Bouille Bourguignonne) is 2,000 grammes sulphate of copper, 1,500 grammes carbonate of soda (Go degrees purity), each dissolved in 50 litres of water separately and mixed as above indicated.

Our solution is purposely made much weaker by using a much larger proportion of water.

stirring meanwhile, the soda solution. This makes four gallons of stock solution. For use we strain one gallon of this stock solution into our spraying can, adding two gallons of water and one gill of treacle (dissolved sugar will do). This quantity is enough for our garden at one time.

Black Spot is a comparatively new trouble with us and we have no information regarding what may be the original host plant. The writer is of the opinion that nurserymen are not as careful as they should be. No doubt the popularity of the new varieties has obliged them, in order to meet the demand, to use hothouse methods in propagation. The moist heat and overcrowding in hotbed frames and grafting cases, fermentation of the manure used in the frames, provide breeding places for the fungi that infect the young plants.

The Scale was imported and, the writer believes, can be readily controlled. As a preventive, all new Rose plants when received should be carefully examined and in every case considered doubtful should be treated with a thorough washing by immersion if dormant, or sprayed if not, with any of the solutions that may be most readily obtained.

All of the suggestions on these pests in the Annual are good if followed up promptly. Our plants, like athletes, are in training, and the rules of the game must be closely adhered to, as to diet, fresh air and cleanliness; Roses examined closely when dormant, spraying during the dormant season as a preventive. Cleanliness above all things is the first consideration. No fresh organic fertilizers must be used in planting. Be sure any manure used is well rotted and put it at least a foot below the surface and never mix with top soil. Do not use organic manure as a mulch; instead, cultivate often and very shallow. A dust mulch is far better.

Obtain information about chemical fertilizers and use them cautiously. There are several very good ones advertised in England which we use here. The large growers for the cut flower trade are not using cow manure for mulching as much as formerly, and some of them are using hot water for their liquid solutions, varying the applications with weak solutions of nitrate of soda, sulphate of potash, and sulphate of ammonia separately, and at such times as are proper for development of leafage, flowers or colour.

It is now considered safer to have all farmyard manures thoroughly rotted under cover, or composted with fresh sod and a little lime.



ROSE ANALYSIS, 1909-1914.

By EDWARD MAWLEY, V.M.H., President N.R.S.

[Reprinted from the "Journal of Horticulture" of November 19th, 1914, by kind permission of the Editor of that journal.]

IT is always interesting to try and trace the influence of the weather of the past year upon our Roses, and more particularly when we know how great must have been that influence upon the ultimate results, as seen at such a large and representative exhibition as that held annually in the Royal Botanic Gardens by the National Rose Society.

To begin at the beginning, the autumn of last year greatly favoured the ripening of the shoots of our favourites, having been singularly warm, rather dry, and very sunny. The same favourable conditions also prevailed during the winter, which, taken as a whole, proved very mild and remarkably dry, with an unusual amount of sunshine for that proverbially gloomy season. Of course, this was far better than a long continuance of severe frost, but it would have been better still if there had been more cold, so that our Roses might enjoy that complete rest which they so much appreciate during what is termed the dead of winter.

Now we come to the pruning period in March, which, whatever it may have been to the Rose, was by no means an enjoyable one for the pruner. There were certainly no frosts worth mentioning, but then the rain was exceptionally heavy and continuous. It must have been after a March like this that the Rev. J. H. Pemberton wrote his now famous dictum to the effect that Rose pruning was most enjoyable when a strong north-east wind was blowing.



Bowl of MME. EDOUARD HERRIOT Exhibited by Mrs. Bide at the Summer Show, 1914

April, on the other hand, proved singularly warm, dry and sunny—while the dreaded month of May, on account of its almost constant unseasonably cold period, was also dry, and on the whole about average in temperature. There, however, occurred during the course of it one or two unseasonably sharp frosts, which must in some districts have given the plants a very undesirable check. The spring, taken as a whole, proved very warm and sunny, although the total fall of rain was above the average.

June, often a most critical month for the exhibitor, was this year moderate in temperature and rather wet. Now we come to July, on the 7th day of which the National Rose Society's Show in the Royal Botanic Gardens was held, and many a Rose show has been marred by adverse weather immediately before the exhibition. In this case the last few days of June, and also the first day in July, proved very hot, after which there came a rapid decline in temperature, which lasted until after the show day. So that the blooms, after being cut, were staged under the most favourable conditions possible.

From what has been already stated it will have been gathered that the Rose season of 1914 was an unusually early one, and consequently the later flowering varieties must have been more favoured than usual in their individual records for the current year—those in column 3 in the tables.

This year's exhibition, although not much more than half the size of the record show of 1913, was an unusually good and representative one, and, owing to the coolness of the show day and previous night, the blooms retained their freshness until nearly the close of the exhibition.

In order that the table of Hybrid Perpetuals and Hybrid Teas, and also that of the Teas and Noisettes, may be clearly understood, it may be advisable at the outset to explain once more the system on which these tables has been compiled. For the last twenty-eight years the name of every Rose in

the first, second, and third prize stands has been taken down at the leading Rose show of the season—that held annually in London in July by the National Rose Society. The results thus obtained have each year been tabulated, and the varieties arranged in the published tables according to the average number of times each Rose was staged—previous to 1913 at the last eight exhibitions, and since then at the last six of those exhibitions. This applies to nearly two-thirds of the Roses which find places in the two tables. For the sorts of more recent introduction the longest trustworthy averages are given instead, while the still newer varieties are placed according to their records for the last exhibition alone.

Hybrid Perpetuals and Hybrid Teas. (See Table 1.)

The varieties in the accompanying list of Hybrid Perpetuals and Hybrid Teas have been arranged as in the previous analysis, according to the average number of times they were staged at the last six exhibitions of the National Rose Society. The first three Roses in the table occupy precisely the same positions as in the previous analysis.

It we compare the first twelve varieties in the two tables only one change will be found, Gloire de Chédane-Guinoisseau having this year taken the place of Caroline Testout. In the case of the leading twenty-three Roses the same remarkable consistency will be observed, for there is only one change in the two lists—George Dickson rises from No. 47 to No. 16, and, on the other hand, Gustave Piganeau falls from No. 19 to No. 24.

Frau Karl Druschki for the third year in succession occupies the premier position on the table, and it is very gratifying to find that such an excellent and dependable pure white variety, which any amateur can grow, should not only be a really good Rose in the garden, but also the most reliable of all Roses for exhibition purposes. The following established varieties have never before been as

Table 1.—HYBRID PERPETUALS AND HYBRID TEAS.

Position in present Analysis.	Average Number of Times Shown.	No. of times shown in 1914 in True Relative Proportion to the Average.	NAME.	Date of Introduction.	Raiser's or Introducer's Name.	colour
,	46.5	40	Frau Karl Druschki	1900	P. Lambert	Pure white
2	12.5	36	Dean Hole, H.T	1904	A. Dickson & Sons	Pale silvery rose, deeper shaded
3	36.3	28	Mildred Grant, H.T	1901	A. Dickson & Sons	Ivory white, tinted peach
4	31.2	27 31	Mrs. John Laing Bessie Brown, H.T	1887	Bennett A. Dickson & Sons	Rosy pink Creamy white
5	30.8	20	Hugh Dickson	1904	Hugh Dickson	Crimson, shaded scarlet
7	30.6	29	Lyons Rose, H.T J. B. Clark, H.T	1907	Pernet-Ducher	Salmon rose, suffused yellow
8	27.5	27	J. B. Clark, H.T	1905	Hugh Dickson The E. G. Hill Co.	Scarlet-crimson, shaded plum Flesh, tinted pink
10	26 8 23 0	24 13	William Shean, H.T	1905	A. Dickson & Sons	Creamy pink
11	22.7	23	Florence Pemberton. H.T	1902	A. Dickson & Sons	Creamy white, edged blush
12	22.0	29	Gloire de Chédane-Guinoisseau	1907	Chédane-	Crimson
13	20.5	15	Ulrich Brunner	1881	Guinoisseau Levet	Cherry red
14	20.5	13	Caroline Testout, H.T	1890	Pernet fils-Ducher	Bright warm pink
14	20.5	11	Lady Ashtown, H.T	1904	A. Dickson & Sons	Pure deep pink
*16	19.0	19	George Dickson, H.T	1912	A. Dickson & Sons	Deep velvety crimson, heavily veined
17	18.2	27	Avoca, H.T	1907	A. Dickson & Sons	Rich crimson
18	15.0	12	Her Majesty	1885 1866	Bennett	Pale rose
- 18 18	15.0	15	Horace Vernet Mrs. A. E. Coxhead, H. T	1910	Guillot S. McGredy & Son	Scarlet crimson, dark shaded Claret red
*18	15.0	15	Mrs. J. H. Welch, H.T	1911	S. McGredy & Son	Rose pink
22	14.2	4	Mrs. A. E. Coxhead, H. T Mrs. J. H. Welch, H. T Mrs. W. J. Grant, H. T A. K. Williams	1895	A. Dickson & Sons	Deep rosy pink
23 *24	13.0	10	British Queen, H.T	1877	J. Schwartz S. McGredy & Son	Crimson Creamy white
24	13.0	4	Gustave Piganeau	1889	Pernet fils-Ducher	Carmine, shaded lake
*24	13.0	13	Mabel Drew, H.T. Dr. O'Donel Browne, H.T.	1911	A. Dickson & Sons	Creamy yellow
27 *28	12.2	17	Elizabeth, H.T	1908	A. Dickson & Sons B. R. Cant & Sons	Carmine rose Rose pink
*28	12.0	12	Lady Barham, H.T	1911	A. Dickson & Sons	Salmon pink
*28	12'0	12	Mrs. Andrew Carnegie, H. I	1912	J. Cocker & Sons	Creamy white
*28 32	12.0	12	Mrs. Cornwallis West, H.T Earl of Warwick, H.T	1911	A. Dickson & Sons W. Paul & Son	White, pink centre Salmon pink, shaded rose
32	10.2	6	Suzanne Marie Rodocanachi	1883	Lévêque	Glowing rose
34	10.3	3	Madame Mélanie Soupert, H.T.	1905	Pernet-Ducher	Pale sunset yellow, suffused amethyst
34	10.3	12	Oberhofgärtner Terks, H.T	1901	Welter	Ivory white, tinted lilac rose
36	10,0	12	Alice Lindsell, H.T	1902	A. Dickson & Sons	Creamy white, pink centre
37	0,0 0,0	9 16	Alfred Colomb Mrs. Stewart Clark, H.T	1865 1907	Lacharme	Bright red Bright cerise pink
37 39	8.8	8	Captain Hayward	1893	Bennett	Light scarlet crimson
40	8.3	9	Mamie. H.T Yvonne Vacherot, H.T	1901	A. Dickson & Sons	Dull rose carmine
40	8·3	14		1906	Soupert et Notting A. Dickson & Sons	Porcelain white, tinted blush Flesh pink
42 43	8.0	5	Claudius, H.T	1908	B. R. Cant & Sons	Carmine rose
*43	8.0	9 8	Edward Mawley, H.T	1911	S. McGredy & Son	Rich crimson
43	7.8 8.0	4 2	Helen Keller Lady Moyra Beauclerc, H.T	1895	A. Dickson & Sons A. Dickson & Sons	Rosy cerise Madder rose, with silvery reflex
46 47	7.3	4	Mrs. John Bateman, H.T	1901	A. Dickson & Sons	Carmine rose
48	7.0		Lohengrin, H.T	1903	Schmidt	Silvery pink
49 50	6·7	9 4 2	G. C. Waud, H.T Charles J. Grahame, H.T	1908 1905	A. Dickson & Sons A. Dickson & Sons	
5 I	6.3	2	Comte de Kaimbaud	1868	Roland	Clear crimson
*52 53	6.0	6	Coronation	1913	Hugh Dickson	Pale rose pink
53	5·8	2	Gladys Harkness, H.T Mrs. David M'Kee, H.T	1900	A. Dickson & Sons A. Dickson & Sons	
53 53	5.8	3	Mrs. R. G. Sharman-Crawford	1894	A. Dickson & Sons	Clear rosy pink
53	5.8	2	Mrs. R. G. Sharman-Crawford Queen of Spain, H.T Kaiserin Augusta Victoria, H.T.	1907	S. Bide & Sons	Pale flesh
57 58	5°7 5°5	2 3 7 4		1891	Lambert & Reiter	Cream, shaded lemon White, shaded blush
59	5'2	1 4	Dupuy lamain	1868	S. McGredy & Son Jamain	Bright cerise
59	5.2	4	Killarney, H.T	1898	A. Dickson & Sons	Suffused pale pink
59 62	5.0	7	Marie Baumann	1863	Baumann A. Dickson & Sons	Soft carmine red
62	2.0	2	Marquise Litta, H.T	1901	Pernet-Ducher	Deep carmine
*62	5.0	5 5	Mrs. George Shawyer, H.T	1911	Lowe & Shawver	Pale rose
*62	5.0	5	St. Helena, H.T	1912	B. R. Cant & Sons	Cream, tinged yellow, soft pink
		1	· · · · · · · · · · · · · · · · · · ·	<u> </u>		Centre

^{*}New varieties, whose positions are dependent on their records for the 1914 Show only.

frequently staged at the National Rose Society's leading exhibition, viz., Gloire de Chédane-Guinoisseau, Avoca, Earl of Warwick, Mrs. Stewart Clark and Dr. O'Donel Browne, and Yvonne Vacherot only once before as well represented.

On the other hand, the following varieties, viz., William Shean, Lady Ashtown, Mrs. W. J. Grant, A. K. Williams, Gustave Piganeau, Mme. Mélanie Soupert, G. C. Waud, Gladys Harkness, Mrs. David M'Kee, Queen of Spain and Duchess of Portland have never before been as sparsely shown; while Mildred Grant, Hugh Dickson, Lady Moyra Beauclerc, Mrs. John Bateman, Comte de Raimbaud, Mrs. R. G. Sharman-Crawford, and Marquise Litta have only once before appeared in as few prize stands.

There is a still further decline in the number of Hybrid Perpetuals in the table—in the 1911 analysis there were twenty-seven Hybrid Perpetuals, in that for 1912 twenty-three, in that for 1913 twenty, and in the one for the current year only eighteen. On the other hand, of the Hybrid Perpetuals on the list, Frau Karl Druschki, Mrs. John Laing, Hugh Dickson, Gloire de Chédane-Guinoisseau, Ulrich Brunner, Her Majesty, Horace Vernet, A. K. Williams and Gustave Piganeau still remain among the first twenty-four varieties in the table, while Frau Karl Druschki, Mrs. John Laing, Hugh Dickson and Gloire de Chédane-Guinoisseau will be found among the leading twelve varieties in that table.

As all good exhibition Roses are, for one reason or another, not equally good for ordinary garden cultivation, I may again remind our readers that of the above mentioned twenty-three varieties, the blooms of which are so often splendidly staged at Rose shows, the following can be recommended for planting in their own gardens, viz., Frau Karl Druschki, Dean Hole, Mrs. John Laing, Hugh Dickson, Lyons Rose, J. B. Clark, Mrs. Theodore Roosevelt, Florence Pemberton, Gloire de Chédane-Guinoisseau, Ulrich Brunner, Caroline Testout, Lady Ashtown, George Dickson,

Avoca, Mrs. J. H. Welch and Mrs. W. J. Grant. On the other hand, Mildred Grant, Bessie Brown, William Shean, Her Majesty, Horace Vernet, Mrs. A. E. Coxhead and A. K. Williams are equally unsuitable, however excellent they may be for exhibition purposes.

The Newer H.P.'s and H.T.'s.

In the present analysis by newer varieties is meant those Roses which are five or fewer years old. In the table of H.P.'s and H.T.'s there are this year fifteen Roses entitled to be so classed—or the same number as in last year's analysis, but one less than in that for 1912. There is no representative of 1909 left on the table—Juliet (vermilion red, reverse of petals old gold) being no longer on it.

Of the varieties first distributed in 1910 Mrs. A. E. Coxhead (claret red), which but for its unfortunate colour would be for all purposes one of the most desirable Roses to grow, having every other good quality a Rose should have, has risen since last year from No. 23 to No. 18. Claudius (carmine rose) has also gone up, but only from No. 47 to No. 43. Ethel Malcolm (white, shaded blush) on its first appearance in the list takes up a place at No. 58.

There are again no fewer than seven 1911 varieties in the analysis headed by Mrs. J. H. Welch (rose pink), with its fine, deep petals, which remains still at No. 18. Mabel Drew (creamy yellow) has also slightly improved its position, being now at No. 24. Elizabeth (rose pink) has risen from No. 47 to No. 28, while Lady Barham (salmon pink) has risen from No. 64 to No. 28—a splendid advance in a single year. Mrs. Cornwallis West (white, pink centre) on it first appearance takes its place at No. 28. Edward Mawley (rich crimson), the easiest to grow and the freest flowering of all the dark Roses, has, on the other hand, fallen from No. 38 to No. 43. On its first appearance Mrs. George Shawyer (pale rose) finds a place at the bottom of the table.

Of the four 1912 varieties George Dickson (deep velvety crimson), which stood at No. 47 in the last analysis, is now to be found at No. 16, a truly remarkable rise in so short a time. This splendid new exhibition Rose has. no doubt, a great future before it, owing to its size, striking colour and lasting form. At this year's exhibition it was often the most noteworthy variety in the prize stands in which it was shown. Next comes British Queen (creamy white), which on its first appearance in the table takes up a place at No. 24. Mrs. Andrew Carnegie (creamy white) is also new to the list, and makes its debut at No. 28. St. Helena (cream, tinged yellow), for which I last year promised such great things, and which I still think will in time perform them, remains at the bottom of the table -it may be owing to the earliness of the season. Coronation (pale rose pink), the only representative of 1913, will be found at No. 52.

Much has been said about the scentless character of our modern Roses, and there is no doubt some truth in the accusation. But that many of them are not so devoid of fragrance as is generally supposed is shown by the following facts. For instance, taking the above fifteen new Roses—on referring to the National Rose Society's "Official Catalogue of Roses" it will be found that seven of them are described as "fragrant" and two others as "very fragrant." This, of course, does not mean that the remaining six varieties have no fragrance at all, but that they are not especially sweet-scented.

All of the above fifteen Roses were raised in the British Isles. Ten of them in Ireland, one in Scotland and the remaining four in England. For further particulars respecting these newer Roses see "Special Audit of the Newer H.P.'s and H.T.'s."

Teas and Noisettes. (See Table 2.)

As I pointed out last year, this is now a much more vigorous section than it was some years ago, owing to the introduction of newer varieties of stronger growth and

Table 2.—TEAS AND NOISETTES.

Position in Present Analysis.	Average Number of Times Shown.	No. of Times Shown in 1914 in True Relative Proportion to the Average.	to the Average.		Raiser's or Introducer's Name.	colour.	
r l	68.5	83	White Maman Cochet	1897	Cook	White, tinged lemon	
2	65.5	73	Mrs. Foley Hobbs	1910	A. Dickson & Sons	Ivory white	
3	64.2	55	Madame Jules Gravereaux		Soupert et Notting		
4	50.7	21	Mrs. Edward Mawley	1899	A. Dickson & Sons		
5 6	49'5	68	Maman Cochet	1893	Cochet	Deep flesh, suffused light rose	
	28.8	31	Madame Constant Soupert	1905	Soupert et Notting	Deep yellow, shaded peach	
7	27.0	24	Molly Sharman-Crawford W. R. Smith	1908	A. Dickson & Sons Henderson		
8	25.7	27	Souvenir de Pierre Notting	1908	Soupert et Notting	White, tinged blush Apricot yellow, shaded orange	
9	24'3 19'3	19	14	1902	A. Dickson & Sons		
10	193	19	Mrs. Hubert Taylor	1909	A. Dickson & Sons	rose	
11	10.0	13	Medea	1891	W. Paul & Son		
12	16.2	23	Mrs. Myles Kennedy	1906	A. Dickson & Sons	Creamy white	
13	13.2	11	Muriel Grahame	1896	A. Dickson & Sons	Pale cream	
14	10.2	19	Nita Weldon	1908	A. Dickson & Sons		
15	10.0	2	The Bride	1885	May	White, tinged lemon	
15	10.0	9	Maréchal Niel, N	1864	Pradel	Deep bright golden yellow	
15	10.0	6	Comtesse de Nadaillac	1871	Guillot	Peach, shaded apricot	
18	9.8	6	Souvenir d'un Ami	1846	Belot-Defougère	Pale rose	
19	9.7	4 6	Catherine Mermet Auguste Comte	1860 1896	Guillot Soupert et Notting		
20	7:7		14 5 5 11 6	1997	W. Paul & Son	Pale chamois yellow	
20	7 [.] 7 7 [.] 5	13 4	Bridesmaid	1890	May	Bright pink	
22	7.5	4	Souvenir de S. A. Prince	1889	Prince	Pure white	
24	7.0	1 2	Innocente Pirola	1 2 2	Madame Ducher		
25	6.3	2	Madame Cusin	1881	Guillot	Rose, with lighter centre	
25	6.3	2	Souvenir d'Elise Vardon	1854	Marest	Cream, with rosy tint	
27	5.7	2	Madame Hoste		Guillot	Pale lemon yellow	
28	5.5	4	Alice de Rothschild		A. Dickson & Sons		
*20	5.0	5	Alexander Hill Gray	1911	A. Dickson & Sons	Deep lemon yellow	
1							

^{*} A new variety whose position is dependent on its record for the 1914 Show only.

bearing larger blooms—although some of those varieties may not have such a pure strain of Tea blood in them. In the present analysis, as in the previous one, all the varieties which are sufficiently old to allow of this being done have been arranged according to their average performance at the last six exhibitions. White Maman Cochet will be still found at the head of the Tea table, a position it has now held for twelve years. It is, however, closely followed by Mrs. Foley Hobbs, Mme. Jules Gravereaux having since last year dropped from the second to the third place on the list. Next come Mrs. Edward Mawley and Maman Cochet, and then at a respectful distance follow Mme. Constant Soupert, Molly Sharman-Crawford, W. R. Smith and Souvenir de Pierre Notting.

White Maman Cochet, Maman Cochet, Nita Weldon and Mrs. Dudley Cross have never before, and Mrs. Myles Kennedy only once before, been as frequently staged as they were at the last leading exhibition of the National Rose Society. On the other hand, Mrs. Edward Mawley, Souvenir de Pierre Notting, The Bride, Catherine Mermet, Bridesmaid, Mme. Cusin and Mme. Hoste have never before, and Muriel Grahame, Comtesse de Nadaillac, Souvenir de S. A. Prince, Innocente Pirola and Souvenir d'Elise Vardon only once before, been as indifferently represented.

The Newer Teas.

There are again as many as seven of these newer Teas in the table of Teas and Noisettes, varieties which are six or fewer years old. Of the three 1908 varieties Molly Sharman-Crawford (eau-de-nil white) has since the last analysis fallen from No. 5 to No. 7. W. R. Smith (white, tinged blush) has risen from No. 9 to No. 8, while Nita Weldon (white, tinted blush) has risen from No. 23 to No. 14. The only representative of 1909 is Mrs. Hubert Taylor (creamy white, suffused pale rose), which since last year has risen from No. 11 to No. 10.

Of the two varieties on the list which were sent out in 1910 that grand Tea Mrs. Foley Hobbs (ivory white) has still further improved its position by rising from No. 3 to the second place in the table. Alice de Rothschild (deep citron yellow) was last year at No. 27, and will now be found at No. 28. The only representative of 1911 is Alexander Hill Gray (deep lemon yellow), which has fallen from No. 23 to No. 29. There is no new Tea on the list that did not appear in the last analysis. Of these seven new varieties five of them are white or nearly white, while the remaining two are some shade of yellow. So that some new pink or rose-coloured Teas are still much wanted. For further particulars respecting these newer varieties see "Special Audit of the Newer Teas."

Table 3.—DECORATIVE ROSES.

Position in Present Analysis.	Average Number of Times Shown in the Six Years.	No. of Times Shown in 1914.	NAME	Date of Introduction.	COLOUR.
r	11.0		Blush Rambler, Cl. poly	7000	Blush rose
2	8.0	9		1903	Clear rose, pink centre
*2	8.0	8		1909	
- 2	80		Coronation, wich	1912	Scarlet crimson, splashed with white streaks
2	8·o	12	Hiawatha, wich	1905	Rich crimson, with white eye
	7.5	6	Rayon d'Or, Austrian Hybrid	1910	Bright gold and canary yellow
5	7'3	4	Madame Abel Chatenay, H.T	1895	Pale salmon pink, deeper centre
*7	7.0	7	Ethel, wich	1912	Clear flesh pink
7	7.0	4	Turner's Crimson Rambler, Cl. poly	1893	Crimson
9	6.7	10	Excelsa, wich	1909	Bright rosy crimson
10	6.0	8	Dorothy Perkins, wich	1901	Rose pink
10	6.0	3	Madame Ravary, H.T	1899	Pale orange yellow, deeper centre
12	5.8	4 6	Lady Gay, wich	1905	Rose pink
13,	5'7	6	Orleans Rose, poly	1909	Vivid rosy crimson
14	5.2	4	Arthur R. Goodwin, Pernetiana	191e	Coppery orange, passing to flesh
15	5'3	4	Jersey Beauty, wich	1899	Rich yellow, opening to cream
16	5.5	2	Gustave Régis, H.T	1890	
16	5.5	5 6	Irish Elegance, H.T	1905	Shades of apricot
τ6	5.5		Lady Godiva, wich	1908	Pale blush, deeper centre
19	5.0	3	Lady Hillingdon, T	1910	Bright golden yellow, shaded
		_	I ata Carres David		fawn
20	4.7	0	Lady Curzon, Damask	1902	Pale pink
21	4'5	3	Mrs. Herbert Stevens, T	1910	White
21	4'5	5	White Dorothy, wich	1908	Pore white
23	4'3	3	Gardenia, wich	1899	Bright yellow.changing to cream
23	4'3 4'2	1	Mrs. Alfred Tate, H.T Albéric Barbier, wich	1909	Coppery salmon, shaded fawn Yellow buds, changing to
~ 3	4 4	2	Alberic Barbier, wich	1900	creamy white
25	4.3	2	Crimson Damask, Damask	7007	Bright crimson
25	4.5	3	T-i C11	1901	Creamy white, edged fawn
28	4.0	. I	ln. m	1904	Coppery rose, shaded yellow
28	4.0	3	Duchess of Wellington, H.T.	1909	Deep saffron yellow, outside
	4 3	3	Duchesa of Weinington, 11.1.	1909	petals orange
28	4.0	4	Léontine Gervais, wich	1906	Salmon-rose, tinted yellow
31	3.7	3	Mrs. W. H. Cutbush, Cl. poly	1906	Bright deep pink
31	3'7	I	Rosa macrantha, H. of species	- 1	Flesh
33	3'5	2	Mrs. F. W. Flight, Cl. poly	1905	Deep pink
33	3.2	I	Rosa Mundi, Gallica	-	Red, striped white
35	3.3	3	Ecarlate, H.T	1907	Light scarlet
36	3.5	3	Château de Clos Vougeot, H.T	1908	Dark crimson, shaded scarlet
36	3.2	0	The Garland, H.C		Blush, changing to white

^{*} New varieties, whose positions are dependent on their records for the 1914 Show only.

Decorative Roses. (See Table 3.)

By this term is meant those varieties which are either not sufficiently large or not sufficiently regular in form to allow of the individual blooms being set up singly at shows like the Roses with which we have previously been concerned. In the accompanying table the varieties are arranged according to the average number of times they were staged in the prize-winning stands at the last six exhibitions of the National Rose Society. For those of more recent introduction the longest trustworthy averages

are given instead. No Rose has been included which has not been staged at one or other of the six shows three or more times.

Blush Rambler still heads the list, followed by American Pillar, Coronation, Hiawatha, Rayon d'Or and Mme. Abel Chatenay. Among the most interesting changes since the previous analysis may be mentioned the following. Taking first the climbing Roses, Coronation and Ethel, both new to the analysis, will be found respectively No. 2 and No. 7. Hiawatha has risen since last year from No. 8 to No. 2; Dorothy Perkins from No. 18 to No. 10; and Lady Gay from No. 16 to No. 12. On the other hand, Turner's Crimson Rambler has fallen in the same time from No. 4 to No. 7, and Jersey Beauty from No. 13 to No. 15. Taking the non-climbing varieties, Rayon d'Or has fallen since last year from No. 2 to No. 5, Arthur R. Goodwin from No. 6 to No. 14, and Gustave Regis from No. 10 to No. 16. According to the average records given in the table the dwarf Roses most frequently staged have been Rayon d'Or, still the most striking representative of the yellows, Mme. Abel Chatenay, Mme. Ravary, Orleans Rose, Arthur R. Goodwin, Gustave Regis and Irish Elegance. see "Special Audit of the Newer further particulars Decorative Roses.

My thanks are again due to those kind friends who so kindly assisted me in taking down the names of the Roses in the prize-winning stands, and so made this analysis possible.

An Audit of the Newer Roses. (See Tables 4, 5 and 6.)

The audit given on the next page is for the varieties of recent introduction, most of which it is impossible to place accurately in the tables owing to their limited records, and to the disturbing influence of a single favourable or unfavourable season upon those records. Each of the voters was requested to place the eighteen H.P.'s and H.T.'s on the audit paper in what he considered their order of merit, and to deal in the same way with the Teas and Decorative Roses.

Table 4.—SPECIAL AUDIT OF THE NEWER H.P.'s AND H.T.'s.

Position in Audit.	NAME		Total Number of Votes.	Votes by Amateurs.	Votes by Nurserymen.		
ı	George Dickson (1912)				744	375	369
2	Mabel Drew (1911)	• • •	 ••		564	306	258
	Mrs. A. E. Coxhead (1910)		 		534	293	241
3 4 5 6	Mrs. Andrew Carnegie (1913	i)	 		464	219	245
5 1	Jonkheer J. L. Mock (1909)	·	 		462	209	253
. 6	Coronation (1913), H.P		 		443	246	197
7 8	Mrs. J. H. Welch (1911)		 		428	233	195
8	British Queen (1912)		 		182	191	190
9 1	Lady Barham (1911)				380	197	183
10	St. Helena (1912)		 		378	185	193
11	Lady Alice Stanley (1909)		 		369	180	189
12	Fdward Mawley (1911)		 		362	166	196
13	Ethel Malcolm (1910)		 		352	1 6 0	192
14	Mrs. Geo. Shawyer (1911)		 		326	141	185
15 .	Mrs. Cornwallis West (1911)	 		320	189	131
	Claudius (1910)		 		299	149	150
17	Elizabeth (1911)		 		264	147	117
18	Marquise de Ganay (1909)		 		224	118	106

Table 5.—SPECIAL AUDIT OF THE NEWER TEA ROSES.

1	Mrs. Foley Hobbs (1910)		 		255	130	125
2	Molly Sharman-Crawford (1908))	 		179	97	82
3	W. R. Smith (1908)		 		173	89	84
4	Mrs Hubert Taylor (1909) .		 		114	62	52
5	Nita Weldon (1908)		 		108	51	57
,	Mrs. Dudley Cross (1907) .		 		75	34	41

Table 6.—SPECIAL AUDIT OF THE NEWER DECORATIVE ROSES.

Dwarf Varieties.

Climbing Varieties.

Position in Audit.	NAME.	No. of Votes.	Position in Audit	NAME.	No. of Votes.
1 2 2 4 5 6 7 8 9 10	Lady Pirrie (1910), H.T. Irish Fireflame (1913), H.T. Lady Hillingdon (1910), H.T. Madame Edouard Herriot (1913). Pernetiana Mrs. Alfred Tate (1909), H.T. Old Gold (1913), H.T. Jes-ie (1909), poly, pom. Louise Catherine Breslau (1912). Pernetiana Queen Mary (1913), H.T.	 25 23 23 21 19 18 17 13 9	1 2 3 4 5 5 7 8 9 10 10	Excelsa (1909), wich	27 22 19 18 11 11 10 9 8 7

The Yoters.

AMATEURS.—Mr. W. Boyes, Rev. F. R. Burnside, Mr. H. R. Darlington, Mr. F. Dennison, Dr. J. C. Hall, Mr. G. A. Hammond, Mr. R. F. Hobbs, Mr. Conway Jones, Dr. C. Lamplough, Mr. E. B. Lindsell, Mr. H. E. Molyneux, Mr. O. G. Orpen, Mr. Courtney Page, Rev. F. Page-Roberts, Dr. T. E. Pallett, Rev. R. Powley, Rev. J. B. Shackle, Mr. F. Slaughter, Mr. G. Speight, Mr. H. L. Wettern, Dr. A. H. Williams and Mr. C. C. Williamson.

NURSERYMEN.—Messrs. G. Burch, C. E. Cant, F. Cant, A. Cocker, W. F. Cooling, A. Dickson, E. Doncaster, H. Drew, W. Easlea, J. Green, W. E. Harkness, E. J. Hicks, W. J. Jefferies, J. R. Mattock, S. McGredy, T. W. Piper, A. E. Prince, W. D. Prior, G. M. Taylor, A. Turner and the Rev. J. H. Pemberton.

Autumn-flowering Roses.

As the usual autumn Rose show of the National Rose Society was not held this year I am unable to insert the usual tables dealing with those Roses.



In Memoriam.

GEORGE GORDON.

By F. W. HARVEY.

By the death of Mr. George Gordon, V.M.H., which occurred on June 13th of last year at his residence at Kew, the National Rose Society lost a vice-president who had for many years been one of its most energetic supporters. It is therefore fitting that, in this, the first issue of the Annual to be published since his death, some recognition of his work, not only in connection with the National Rose Society, but in the advancement of horticulture as a whole, should be placed on record.

The son of a gardener, it may safely be said of Mr. Gordon that his whole life was devoted to the study and cultivation of plants. It was at Buscot in 1841 that our colleague made his entrance to this planet, and after a thoroughly practical grounding in the principles and practices of horticulture he found himself, at the age of twenty-three, in charge of the Elms Estate, Hampton Wick. Here it was that the late Shirley Hibberd found him, and discerned in his literary efforts the making of a journalist, the ultimate outcome of which was that he became sub-editor of the "Gardeners' Magazine," which had Mr. Shirley Hibberd as its editor.

From that time onwards all branches of horticulture received his closest attention, and in 1888 we find him organising a Fruit Conference at the Crystal Palace, the result of which was the formation of the British Fruit

Growers' Association, with Mr. Gordon as Vice-President. On the death of Mr. Shirley Hibberd in 1890 he was appointed Editor of the "Gardeners' Magazine," a post that was only relinquished just a few months previous to his death.

From the time that he entered his journalistic career floricultural societies claimed his special attention, and he was among the founders of several national organisations that still exist for the advancement of some special flower. The National Rose Society, as one would expect, early received the benefit of his organising abilities, and in 1890 he became a Vice-President. Just what our Society owes to his enterprise and energy it is difficult, or probably impossible, to say; but we do know that he was ever ready to put his shoulder to the wheel where sound, constructive work was to be done. In 1912 he was elected Chairman of the Publications Committee, and to his resourcefulness, knowledge and enterprise the publications of the Society owe not a little of their success. Recent issues of the Rose Annual bear eloquent testimony to the fluency of his pen, and for the he undertook to summarise the numerous symposiums on the vexed subject of classification. It is not saying too much to state that his summary elucidated many points that were rather obscure in the symposiums, and enabled members to obtain a clearer perspective of what the various writers had in mind.

The Rose Conference held at the White City last summer was an event that he had very much at heart, and only a few who were behind the scenes know what a vast amount of work he undertook, as Organising Secretary, in an endeavour to make it a success. That it fell short of general expectations was due to no fault of our lamented friend, but to a combination of circumstances over which he and other members of the Council had no control.

Horticultural honours of many kinds were conferred upon him, but the one that was most appreciated was the Victoria Medal of Honour in Horticulture. When this was first instituted by the Royal Horticultural Society in 1897 Mr. Gordon was among the first recipients, and those who were privileged to know him felt that the honour was well and truly deserved.

Continental exhibitions received considerable assistance from him as a juror, especially the Ghent Quinquennial Shows and those held from time to time at Hamburg, Haarlem and Antwerp. A deliberate and forceful speaker in debate, backed by a bold and rugged countenance, he was not slow to drive home any point that he had at heart. Not only the National Rose Society, but horticulture generally, has lost a staunch and beloved friend.



THE ROSE CONFERENCE.

THE ABOVE CONFERENCE WAS HELD AT THE

ANGLO-AMERICAN EXPOSITION.

SHEPHERD'S BUSH, LONDON, W.,

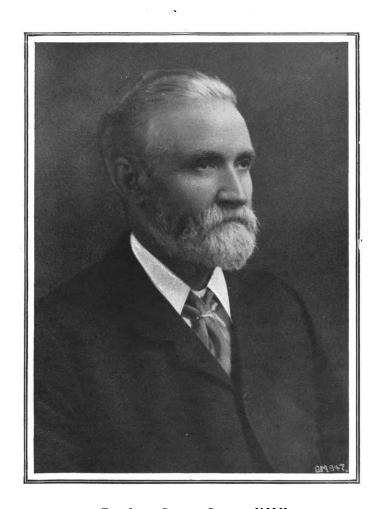
ON TUESDAY, JUNE 23RD, 1914, AT 3 P.M.

CHARLES E. SHEA, Esq. (President of the National Rose Society), in the Chair.

THE CHAIRMAN:

Before calling upon the readers of the papers set for discussion at our Conference to-day, I should like to say a few words as to the unique circumstances under which the Conference is held. As you know this "Exposition" has been organised to celebrate the hundred years of peace between the two great English-speaking peoples of the world, and also to demonstrate the enormous progress which has been made in the arts, sciences and industries in those countries. And I think I can fairly claim that all three—Art, Science and Industry—are embraced in Horticulture. That is absolutely true. Therefore, we find horticulture one of the prominent industries which in the grounds of this Exhibition have attracted and deserved notice.

To exemplify these varying aspects of horticulture, a series of Conferences has been arranged by the authorities of this "Exposition," and naturally the Rose has taken a front



THE LATE GEORGE GORDON, V.M.H.

place in those Conferences, and to-day we are met to deal with what most of us deem to be the most beautiful flower in the world, The Rose.

One Hundred Years of Peace.

Let me revert for a moment to the prime object of the whole Exposition, the celebration of one hundred years of peace between this country and the United States of America; and we see in this celebration of the one hundred years not of simply the peace of the past, but of an everlasting peace, for that a war should take place between the two great English-speaking peoples of the world is a crime against humanity which is inconceivable. There can be no such war between us, for I think I am right in saying that into the hands of those two English-speaking peoples are committed the progress and happiness of the world.

The Love of the Rose.

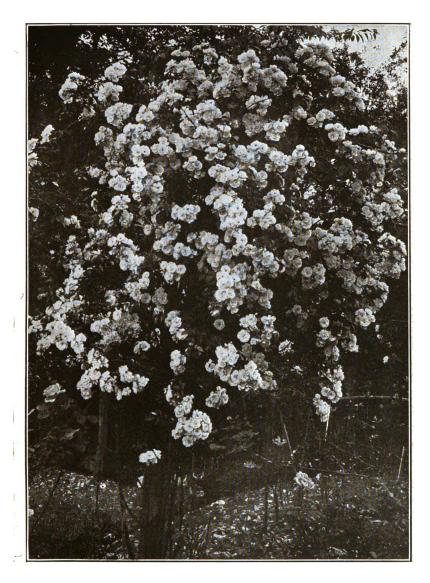
The subject of the paper which Mr. Darlington will presently read is: "The Progress and Development of the Rose during those One Hundred Years," and so I shall not touch upon that point, but I should like to say a few words on the progress of the "love of the Rose" during those one hundred years. Until the year 1876 there was no organisation which drew together, and helped, and educated the lovers of the Rose. At the end of that year a few enthusiastic Rosarians met together and founded the "National Rose Society." That was in 1876. If we compare the small things of that day with the present time, we see how vast, how wonderful, the progress made. Even as late as 1907 that Society had only about 2,400 Members. To-day, as I am speaking, it has over 6,300 Members. And every day brings to us a continuous increase of the Members.

What does all that mean? The increase of the appreciation and love of the Rose. But it is not confined to ourselves. I remember it used to be said of our English Parliament that the English Parliament was the Mother of all the Parliaments of the world, and I think it can in truth be said that the National Rose Society is the Mother

of all the Rose Societies which exist. Our Rose children are many, the different Rose Societies which have come into existence are many, and perhaps one of the latest and most strenuous is the City of London Rose Society, which holds its Exhibition in the heart of the City of London, showing to us that the Rose carries its charm and its comfort even into the very heart of the great city of strenuous work. If we look abroad to the increase of the Rose Societies, we see the affiliated societies which literally swarm. Perhaps the latest recruit of all is the society—the first Annual Report of which has just been received, and which I hold in my hand—the Rose Society of Ontario, Canada, the first President of which, we see, is our old friend Mr. E. T. Cook, formerly a Vice-President of the National Rose Society. We extend all good wishes to that Canadian Rose Society.

Alexandra Day.

As to the Rose Societies of the United States, I cannot enter into any detailed description of them, but we know that they are as keen, able, and successful as the best Rose Societies on this side of the Atlantic, for they love the Rose as we do. Very, very, many years ago, I think almost half my life-time ago, I was in the Wild West, and I was shown what was called the Prairie Rose. Well, it was not a Rose at all, but that did not matter; it simply showed this, that in their love of the Rose they put that name to the flower they thought most beautiful. Then a still further development of the love of the Rose, not a real Rose at all. There is a tiny little white wild Rose which always blossoms on Alexandra Day, and huge consignments of that Rose have gone right through the world to our Dominions, our Colonies, and places which are not our Colonies, to where little groups of our fellow-countrymen are gathered together. These little Roselets are surely messengers of love sent to the extremes of the world to Rose lovers, for them to wear as a mark of their esteem for the character of the Royal Patroness of our National Rose Society, Queen Alexandra. God bless her, and may she be long spared to us.



MME. D'ARBLAY IN THE GARDEN OF MR. EDWARD MAWLEY, BERKHAMSTED.

I will now ask Mr. Darlington to read his paper on "THE PROGRESS AND DEVELOPMENT OF THE ROSE DURING THOSE ONE HUNDRED YEARS OF PEACE."

MR. H. R. DARLINGTON:

I

I have had some serious thought how it is that you have been so kind as to confer upon me the honour of opening this discussion on the development of the Rose during the last hundred years at this Conference, and I have been a little bit puzzled, but we are celebrating a long peace with America, and it has occurred to me, and it occurred to me last night particularly as I paused in front of a large bed of Richmond in full flower, looking at its very best, that possibly the reason that you have asked me to come and open this discussion, in remembrance as it were of our friends from America over the water, has been my especial love for the Rose Richmond, an American Rose brought out by the E. G. Hill Co.

America's Help.

The subject that I am to deal with this afternoon is the development of the Rose during the last hundred years. It is not a little remarkable that the development of our modern Rose almost accurately coincides with these hundred years of peace with America. It is mere coincidence except to this extent, that the Americans, at the beginning and in the middle and at the end of our period, have proved of great assistance in the development of our favourite flower. At the very beginning and again at the end they have helped to produce a new group or race of Roses for the world.

Theophrastus.

M. Jules Gravereaux has told us that for two thousand years the Rose has suffered from a phrase which was perfectly accurate, but which has been accepted, like many other true things, without any limitation, as if it covered the whole

ground. Three hundred years before Christ Theophrastus wrote a book on the history of plants, and in that book he naturally dealt with the Rose. It is clear that he knew something about Roses, because he said that they differed not only with regard to the number or the fewness of their leaves, by which he meant the petals, but that they also differed in their roughness or smoothness of texture, in their colour and in their perfume; and he went on to say that most Roses had five leaves, or five petals, to use our modern term; but that there were many that had nine petals and twelve petals and twenty petals, and that he had heard it saidhe evidently would not put it on his own authority—that there were Roses with as many as one hundred petals. evident, therefore, that 300 years before Christ Theophrastus knew a great many Roses. The Romans were in the habit of accepting from Greece their art wholesale, and we find that Pliny, who also wrote a book of Natural History, mentions twelve different varieties of Roses, and he repeats this famous saving of Theophrastus, which is as follows:—

"The Rose can be raised from seed . . . but on account of its slowness in coming to maturity, it is directed to be propagated by cuttings."

-To that statement, which was incorporated by Pliny without acknowledgment or limitation, the Rose has suffered for 2,000 years. There is no doubt that the development of the Rose during that period almost stood still. Pliny, as I mentioned, had twelve Roses. Even Parkinson in 1656 had only twenty-four; and it is a very curious thing that while the influx of the barbarians for a time evidently drove the Rose into the convents, and into the big castles of the country where some protection could be afforded, yet when the new learning came about and a revival of gardening took place, the Rose did not for some hundreds of years benefit to the same extent as the anemone, the daffodil, the tulip, the pink and many other flowers. These were studied by our florists long before the Rose came to be developed at all. Development was only just beginning at the end of the 18th century.

China, Damask and Boursault Roses.

Nevertheless, during that 18th century, three great importations had been made — the importation of the three forms of Rosa indica, which were to form the foundation of our modern garden Roses. At the beginning of the 18th century, that is, 1718, came the Old Blush Monthly Rose, a Rose that is always flowering. About three-quarters of the way through the century there was brought into England Rosa indica semperflorens, the Red China Rose, and towards the end of the century, according to some, or at the beginning of the 19th century, according to others, there was imported into this country Rosa indica odorata, the origin of our Tea Roses. Very shortly after that we had two other developments. The limitation that Theophrastus had imposed on the propagation of the Rose was being gradually cast aside and people were beginning to sow Rose seeds. The result was seen very early in the century, for in 1809 came Lady Portland's Rose, the first of the Perpetual Damask Roses. A year later we got the first of the Boursault Roses, a hybrid of the Rose There are several of the Boursaults still in our Alpina. In the first year of our period (the year of the Battle of Waterloo) we find that the number of names of varieties had risen to 250. This was undoubtedly a great advance in the production of the Rose. But I say "the names of varieties" advisedly, because, while the varieties had increased in number there is no question that the number of synonyms had also increased, and very many of the names of that period are attributable to one Rose only. In several cases you will find four, five and six names given to the same Rose. M. Gravereaux has worked this out on an elaborate scale, and I will give you one name only, Agatha Incarnata, which is the same as the following six Miller called it Rosa Incarnata. It was also called Tout Roses. Aimable, Tendresse Admirable, Caprice de Zephyre, Marie Louise, and also years later (and under this name it is possibly remembered by some of us to-day) the Duchesse d'Angouleme. In 1815 therefore it can only be said with certainty that there were 250 names, though probably there were a

good many varieties as well, and the year 1815 is of importance in another respect. In that year came before the world, or rather before the Director of the French Gardens, Comte Lelieur, a Rose which was the foundation of our modern hybrid perpetual Rose. The seed must have been sown some year or two previously by Souchet, a French gardener, and in August, 1815, he showed this Rose to Comte. Lelieur. For several years afterwards it was known under the name of Comte. Lelieur, but Louis XVIII took a great delight in the Rose, and in consequence, when it was brought out in 1819 it became known, in compliment to him, by the name of Rose du Roi. Another great race started at the same date, and to this we are indebted to our friends from America. I refer to the Noisette Rose. Probably the seed must have been sown about the same time as the seed of the Rose du Roi, and the first plants were sent from America to Paris in the year 1817. We find therefore at the beginning of our epoch the rise of two very celebrated This Noisette Rose, which was sent from America to Paris, has probably disappeared from our gardens, but it is still to be found in its representatives. We have Aimée Vibert, a seedling brought out in 1828; Lamarque, 1830; and Céline Forestier, 1858; and Maréchal Neil, perhaps the best of the whole race, was obtained in 1864. I do not know that any Noisette has been brought out comparable with Maréchal Niel at its best.

Increase of Varieties.

Now let us notice what a wonderful development followed. We had 250 Roses in 1815; in 1828 there were no less than 2,500—ten times the number. That is to say they had come out at the rate of 173 Roses a year, and it is only in very recent years indeed that this volume of production has been anything like equalled. That development went steadily forward. In 1845 we had 5,000 Roses; when the "Noms des Roses" and its wonderful list of Roses, with which many of you will be acquainted, was published in the year 1906, we had over 11,000; and the probability is that to-day we have something like 12,000 Roses.

Real Advance.

Why am I laying stress on this wonderful production of Roses? I want to carefully distinguish between the development in the number of varieties and the true advance in the Rose. The development in the number of varieties has, since the beginning of our period, been absolutely consistent and steady. The advance in the development of the Rose has been of quite a different character. Instead of a steady stream it has come by a series of jumps, and it has always followed the same general process. these jumps has occurred, and a new race of Roses is founded, sometimes scarcely perceptibly at first, sometimes after long and wearisome experiments and perhaps great failure, the new group has grown. It has suddenly arisen and then it has proceeded to develop; and the arrival of a new group has always been followed in the next few years by a certain development within that group; so that it is not always the first Rose of the new group, great though may be the real advance, that first receives recognition by the public. Besides this distinction between the two methods in which our Roses have developed (between the mere increase of varieties and the rise of new groups), the development of the new groups has taken place in two absolutely different fashions. In the first case we find the new group develops out of the Roses which were growing in gardens at the time, and has been obtained by seed sowing, and by careful crossing and selection of varieties; and by that means have been obtained some of our most notable groups. In this way we got the hybrid perpetuals, the hybrid teas and if, as I think, it is a new group, the modern Decorative Tea and the modern China Rose. These are in themselves quite distinct groups, and they all grew by this gradual process of cross-fertilisation and selection.

Hybrid Perpetuals.

Let me trace two of the big groups. First of all, the hybrid perpetual which, as I mentioned, started with the development of the Perpetual Damask in the Rose du Roi.

My friend Mr. Pemberton, with a sort of prescience of what I was going to talk about, has been so kind as to bring before us a small vase of the Rose du Roi, and I hope he will allow those who are interested in it to see the wonderful flowers which laid the foundation of our hybrid perpetual Roses, and as I have also said laid another foundation, the foundation of the flower trade of Paris. The flowers are not very much to look at, but they are perpetual and give a continuance of flowering. We did not get the true hybrid perpetual until the year 1842. In that year two Roses were brought out to found the new race; one was La Reine, and the other Mme. Prevost, introduced by two French raisers, and the process by which they came can be traced. First came the Portland Rose, then the Rose du Roi, then there was Athalin, then Malton, then Mme. Laffay, all gradually improving till we got to the true hybrid perpetual in the two Roses I have mentioned, La Reine and Mme. Prevost. A few years later we got the first of the true hybrid perpetual red Roses in Général Jacqueminot, and this Général Jacqueminot had an interesting and even pathetic history. An amateur called Roussel had a garden at Mendon in which he was fond of hybridising; but during the whole of his life he never succeeded in raising anything of great renown. On his death he left his Roses to his gardener, whose name curiously enough was Rousselet, and a year after M. Roussel died there appeared the Rose called Général Jacqueminot. You all know it; its wonderful colour, delightful perfume and freedom of flowering even for a hybrid perpetual.

Hybrid Teas.

The hybrid teas have followed very much the same route. The first of them, La France, appeared in 1867. In 1873 we got two more of these new Roses, Captain Christy and Cheshunt Hybrid, for which we are indebted to Mr. George Paul. Now the development has followed an exactly similar course in both cases. First the birth and recognition of the new race, then the development of the

new varieties within the race. Caroline Testout and many others followed. Perhaps the two Roses which were most prolific in the production of the new race of hybrid teas were Victor Verdier, a Rose which many years before had possessed something of the character of the hybrid teasand a wonderful Rose, which I believe I have never seen myself-Mme. de Tartas. Now Mme. de Tartas was really an extraordinary Rose, for not only was it one of the parents of Cheshunt Hybrid, but it was the foundation of another race, the race of modern Decorative Teas, among its children being Marie van Houtte, Mme. Lambard and Anna Maria de Montravel. Through the last-named Rose it has founded again yet a third race in the Polyantha Pompons. I think, therefore, I am justified in saying that Mme. de Tartas is worthy of special recognition by Rosarians.

I have dealt with the first method by which the new groups of varieties have been produced.

Multiflora Group.

The second method has been of an entirely different character, and curiously enough it has generally occurred in the climbers. It has been effected by the more or less immediate cross of some Rose having a good deal of indica blood in it, or R. indica itself, with one of the species of wild Roses. We find an instance of this occurring direct in America both at the beginning of our period in the Noisette Roses, and also 100 years later at the end of that period in the wichuraianas; both these groups at the time they were introduced created something in the nature of a revolution in our gardens. Now these are instances of this jump I have spoken of occurring almost as soon as the new race was brought out. If we take the Multifloras, another instance of this second method of production of new groups, we find something very different occurring. Rosa multiflora was introduced into this country in 1785, but the first hundred years of seed sowing from that Rose produced nothing of any real value, many crosses being tried during that period, of which perhaps the two best known are a Rose called Grevillia, or the Seven Sisters Rose, and Laure Davoust, which is still to be found in many gardens up and down the country. But it was one hundred years and more after the introduction of R. multiflora before we got the first of the modern Multiflora group brought before us in Turner's Crimson Rambler, which came out in the year 1893, and at once revolutionised our gardens.

Pernet Group.

The latest of the new groups of Roses, curiously enough, is in a way a combination of the two methods. new group is a group which has recently been recognised by the National Rose Society as having been worthy of that distinction; it is a group brought out by M. Pernet-Ducher, and I understand to be called the Pernet group. It was brought out by M. Pernet-Ducher in this way; he hybridised the Rose, Persian Yellow, which for a long time had been in our gardens, but no doubt is not far removed from a known species, with the hybrid perpetual Antoine Ducher, and that cross gave the Rose Soleil d'Or, a yellow Rose not of very much value for garden purposes, but which has proved a most useful and prolific parent; and undoubtedly some of our most interesting garden Roses of the present time, Rayon d'Or, Willowmere, Mme. Edouard Herriot, and the "Daily Mail" Rose are instances of Roses sprung from this new cross. This new group, as I have said, has arisen partly by the first and partly by the second method. But there, just as in the other two cases, you get exactly the same procedure followed, namely, first the new group has arisen, and then has followed development within the group.

THE CHAIRMAN:

We have had from Mr. Darlington what I knew we should have, a most useful and scholarly resume of the progress of the Rose during the one hundred years of peace. Wisely, I think, and logically, he did not finish it, but no doubt that will come on another occasion. We have some very distinguished Rosarians on the platform who wish to speak on the subject.

THE REV. JOSEPH H. PEMBERTON:

I am very pleased to come here and have a talk about the Rose. However, it is very difficult to follow after such a speaker as Mr. Darlington, because, as happens in nearly every case when you are at a Conference, the first speaker takes the plums out of the basket and one has not very much left. He referred to one or two things I might have spoken about, and I will pass those over. I desire to confine my attention this afternoon to just the one hundred years; I do not want to go back further than that. Let us look at the development of the Rose during the last one hundred Mr. Darlington very kindly called your attention to the Rose du Roi, two or three blooms of which you will find down the side of the hall, and this brings me to another instance, in which I thought I might go outside the one hundred years. I have given you a Rose that was grown in England in 1575. That was old, but that is just to accompany the others, so that they might feel young in comparison with the old York and Lancaster.

The Empress Josephine.

This is an age when one talks a good deal about the ladies, and I think with regard to these last hundred years one lady in particular has had a great deal to do with the development of the Rose, for it is no good for raisers to bring out new Roses, it is no good for Mr. Cant to show his beautiful seedlings in the garden if you do not get anybody to look at them or care for them, and if there were no lovers of Roses, I do not think that the trade would go on trying to give us new beautiful varieties. end of the last century the Rose was one amongst many flowers. Everyone was running after tulips. came a lady, the Empress Josephine, who was devoted to her flowers. She loved her garden, and she knew what a help it was when she had troubles and difficulties-and she had a good many of them-to get into her garden right away from the trouble, and go down to her country seat at Malmaison. She said: "We have collections of tulips and

other things, why not have a collection of Roses?" Then she ordered her head gardener to form a collection, and just to stir up and encourage people to bring out new races she had a rosery. She did the thing thoroughly. She said to the gardener: "Get every Rose you can and name them all;" and I believe at that time she had about 250 varieties, and at the present time at Malmaison, owing to M. Gravereaux, they have the same garden, the same shaped beds, with the paths as she had them then, and the same Roses, so far as they can find out the varieties she grew, are growing there now. She got a man as her botanist called Ventenat, and he not only planted the flowers, but she, with his help, studied the botany of Roses. Not content with that, she went to the celebrated painter, Rédouté, and got him to paint the Roses, and it is to her that we owe those beautiful volumes of Rédouté, the authority on the Rose in the days gone by. If you have not seen those books, go to the British Museum or to the library of the Royal Horticultural Society and study them; and when you go, remember they are the result of the Empress Josephine stirring the people up to form these collections. What was the result? She was at the head of French Society, and every lady in the fashion said: "We must have Roses too. If the Empress has Roses, we must have Roses." And so away they all went to their own gardens and had Roses, and the result of that was that raisers of Roses sprang up all round. Mr. Darlington has told you about the Noisette, and amongst the raisers of others were Laffay, Desprey, Hardy, Vibert and Prevost. All of these we owe to Empress Josephine. Looking through the list of supposed to grow, I find Provins 107, she was Centifolia 30, Rosa Indica 21, and 9 Damasks. But you notice that not one of those were autumn flowering; that is, they only had one crop of flowers a year. And it was just at the end of her time that the perpetual flowering variety -that is the variety which gives more than one bloom a year-was discovered that from the Portland and the Rose du Roi, and the result of those two parents being the hybrid perpetual.

Noisettes.

Now we are thinking about our American friends. Mr. Darlington has mentioned the Noisette. The Noisette raised in America by Phillippe Noisette, and was called in those days Noisettiana, in honour of the man who raised the Roses. You can always tell a Noisette by the way the foot-stalks form on the centre stalks. sent it over from America to Paris to his brother Louis for propagating, and so you get the Maréchal Niel as a Noisette, and you get some of the most popular Roses coming from the special Rose which Phillippe Noisette raised in the United States. A celebrated gardener, M. Jacques, in 1825 was head gardener at the residence of Louis Phillippe, Duc d'Orleans, at Chateau Neuilly. He has given us several well known Roses: Adelaide d'Orleans in 1826; Leopoldine d'Orleans in 1828; and in the same year Félicité-et-Perpétue. Referring to the National Rose Society, I can remember showing Roses in Rose boxes before the National Rose Society was formed, and we had nothing in those days but hybrid perpetuals and a few Teas, so that you can imagine the progress of the Rose from that day to this; but what we want more than anything else at the present day is that they should be perpetual, that is, they should be as good in the autumn as in the early summer.

Wichuraiana and Pernetiana.

We had very few ramblers in the early days. We have now, as Mr. Darlington has told us, the wichuraiana class, and the Americans have been of the greatest help in the production of wichuraiana Roses. I am referring to such Roses as Dorothy Perkins, and so on. The pioneer was a European, but two Americans who have given us some of the best wichuraiana ramblers are Mr. H. Walsh and Mr. Manda. In regard to the latest great race, everybody calls it the Pernetiana race all over the world, and if the National Rose Society is going to keep pace with the rest of the world, it must fall into line and give M. Pernet-Ducher the honour that is due to him for bringing out such a fine race of Roses.

You should remember his great object is the colour of the Rose and the freedom of flowering; never mind the shape. Of course, we like good shape, but those are the two most important things, and if you look down the lists of Roses, they are the most popular Roses of the present day, we have a great many of them—Prince de Bulgarie, Joseph Hill and Mme. Abel Chatenay are some, and last of all those glorious yellow Roses, Rayon d'Or.

But whilst I have spoken about the French and American growers, we must also remember that in the last few years we have had tremendous help from our own people in Great Britain.

THE CHAIRMAN:

The only remark I have to make is that if it is decided to group the Pernet Roses they cannot for botanical reasons be called Pernetiana. Still, that is a detail. I will now call upon Mr. Holland.

Mr. Holland:

Mr. Pemberton had to complain of the previous speaker having stolen some of his thunder. I think I might plead at this stage that the two previous speakers have left very little to be said about the hundred years of peace, and the progress of the development of the Rose. May I just draw the brush very briefly over this one hundred years. We are told that we are under an obligation to America in the first instance for something that was brought by way of France. We were certainly very much under an obligation in the middle of the last century to France. The great impetus given to Rose growing in this country was largely due to the introductions we had from France, and they came in the form of those beautiful dark Roses in which we all still delight, and some of which I hope will last for many years. Later, Englishmen took up this hybridising of Roses and did it thoroughly well. I believe on the banks of the Thames one or two of the choicest Roses were raised. Then came

the Ulstermen taking the wind out of our sails, and we are very glad they did so. Messrs. Alexander Dickson, Hugh Dickson and McGredy in the north of Ireland have brought out many beautiful Roses under the title of Hybrid Tea, originally used to specify a cross between a Hybrid Perpetual and a Tea. The crosses have, however, become so numerous that the term is very difficult to define at the present time.

New Roses from America.

America has helped us greatly, producing not only Roses that will give beautiful specimen blooms, but Roses which will give an enormous display in the form of pillars, arches and the like. In my own Rose-growing career, which is a somewhat long one—I began when I was about twelve years of age—I think one of the greatest developments came with the introduction of Crimson Rambler. It was a Rose which everyone could grow, and one which made a fine display in every garden, and it became exceedingly popular. From that time progress has been most marked. The popularity of the Rose has greatly increased, and the demand has stimulated the supply. Such advances of the Rose could not take place during savage and barbaric times, therefore one may justly join with the one hundred years of peace the development of the peaceful art of horticulture.

One other point is, that with the development of the Rose, at the present time there are far too many names in the catalogue. It would be a good thing to eliminate some of them.

If we were to look around this hall to-day, one of the great points which must strike the observer is the development in shape, in colour, and perhaps in scent. Those are things that one would desire to see carried out to greater perfection in the future. I should like to ask as a lover of Roses that we might get to the perfect crimson Rose. I should like to get to the perfect yellow Rose also, and to have a Rose not only having a good shape and colour but also a good scent.

Mr. Frank Cant:

We are celebrating here to-day the centenary of peace between America and the British Isles. May I express the hope that it will not be many years distant when universal peace may reign throughout all the world?

One of the speakers has said that the very fact of the demand for Roses has created the supply. In a measure that statement is correct, but the fact must not be overlooked that the introduction of new and better varieties has played a very important part in creating a demand for them; and that is demonstrated by the many new seedlings which are exhibited here to-day. The introduction of beautiful new-Roses has created the demand. Lovers of Roses have bought a few new Roses and planted them in their gardens. have grown them successfully and their neighbours have been jealous, not in an unfriendly jealousy, because they have seen a new and better Rose in their neighbour's garden, and they have not been happy until they have possessed it themselves. That is one of the reasons why the queen of flowers has become so popular throughout the British Isles during the last forty years; and long may she continue to grow in popularity because, after all said and done, the Rose is the queen of flowers; no other flower responds more to kindness and devotion than the Rose.

No flower has played so prominent a part in history as the Rose, and I have it on the very best authority that Roses were grown by the Greeks and Romans and were supposed to possess many medicinal virtues, not the least of which was that the extract from the petals of the Rose was supposed to remove freckles either from the hands or the faces of fair ladies; and that extract became so valuable that a lucrative industry sprang up.

Those of us who can look back to some thirty or forty years, and recall the Roses which were exhibited in those days, will remember Mme. Clemence Joigneaux, John Hopper, Annie Wood, Annie Laxton, Duc de Rohan, Emilie Hausberg, Emily Laxton, Edouard Morren, Hippolyte Jamain, Mme. Lacharme,

Magna Charta, Marguerite de St. Amand, Marquise de Castellane, Paul Neyron, Comtesse de Serenye, Duchesse de Vallombrosa and Souvenir de la Malmaison, Nardy Freres, Victor Verdier, and Mme. Nachury, which were relied on by exhibitors to win prizes. Gloire de Dijon was often found in a winning box of 36 or 48 blooms, and Mme. Nachury was so good that two flowers of this particular variety were at the Crystal. Palace in 1872, but unfortunately on account of duplicates the stand was disqualified. I venture to think that most of those Roses are strangers to the ladies and gentlemen who are here this afternoon.

THE REV. J. PEMBERTON: No.

Mr. Pemberton says "No." Mr. Pemberton has shown them all! I will only ask him does he do so now? These Roses had to go down simply because new and better varieties were introduced. How could poor John Hopper stand side by side with Mildred Grant and others? He was not good looking enough; so he had to take a back seat.

A MEMBER: He had got more perfume, though.

Though these Roses were good in their day the hybridist has given us better. I question, therefore, whether the demand for new Roses has created the supply, and think rather that the supply of new and better Roses has created the demand.

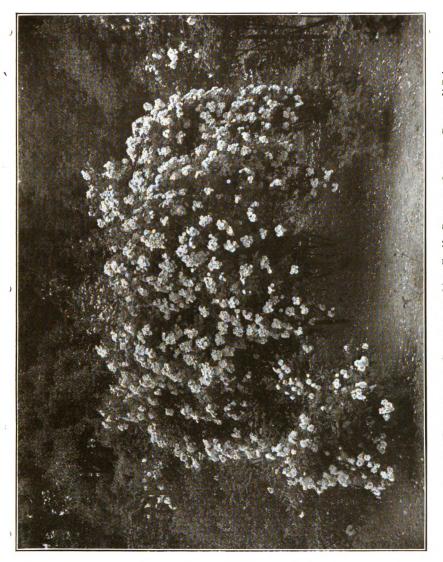
MR. EDWARD MAWLEY:

I have listened to the remarks of the speakers at this Conference with the greatest interest. For never before have we been able to realise so fully the changes that have taken place in Roses and Rose culture during the past memorable century, nor have we before had those changes so clearly and ably placed before us. In the advances made by the Rose during the last forty years our National Rose Society may, I hope, be allowed to claim the credit of, at all events, lending a helping hand towards the encouragement of all that is best in the progress of the Rose itself, and also in our methods of cultivating it. In comparing the

first official catalogue of the National Society, which was issued in 1884, with that of 1914, I find that of the varieties mentioned in the former, only eighty-one out of about six hundred Roses have been considered worthy of a place in our last issue. But there is, of course, and ever will be, a great deal before us which requires setting right in the Rose world. It is now sixteen years since we had any severe winter frosts in the southern half of England. Is it not more than doubtful whether some of our modern Roses will be able to pass unharmed through such severe winters, should they come, as undoubtedly come they will. Let us, on the other hand, consider what a blessing we already possess in this incomparable flower, the Rose. All things considered there is no flowering plant equal to it. It is easy to grow, can be had in bloom almost the whole year round. We have not as yet had a blue or black Rose, but almost every other colour is already represented in the Rose world. Varieties can be had only a few inches high, while others can be made to cover the side of a house. Pillars, pergolas, banks, etc., can be clothed with Roses, or they may be grown in beds or in the form of ordinary or tall weeping standards. Roses are seldom without some fragrance, while many kinds have a most delicious perfume. Nevertheless, plenty of work still remains to be done during the coming century. We want more hardy Roses, we want more really fragrant Roses, we want more vigorous and continuous flowering Roses, we want more climbing Roses which flower again in the autumn. We want Roses which will resist mildew, black spot and other similar fungoid pests. We do not want so many butterfly Roses, as I call them, Roses with scarcely more than a dozen petals; but it will thus be seen that although we have gained very much in other ways, we have lost something in fragrance and fulness of the flower.

Mr. George Gordon, V.M.H.

I have reserved a few words for the last, as they are very sad words, for we have with little warning lost a Vice-President who was to have been the backbone of



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this Conference, and who took the leading part in its organisation, but never lived to see the work he had so ably begun carried out. I refer to our dear friend George Gordon. I say dear friend, because I had known him almost ever since the National Rose Society was started, and I feel sure all present will agree with me that scarcely anyone connected with horticultural work could have worked so earnestly, ably and continuously with his fellow horticulturalists without raising the least ill-feeling, even among the most exacting of them. He loved his work, and he was on the friendliest terms with all those with whom he was brought in contact through the whole of his long and useful life.

THE CHAIRMAN:

There is just one point which has not been touched upon in the progress of the Rose, and that is the fact that there has been something else progressing, namely, the enemies of Mr. Mawley has touched upon two on this side of the Atlantic, but on the other side I understand they have got thirteen. They have sent us beautiful Roses, but I hope they will keep those other things there. I was working it out from a very able article in this Annual Report of the Ontario Rose Society, and they make out the number to be thirteen; they have five fungoid enemies of the Rose and eight insect enemies. Of these latter three are classified as sap-suckers, and the others as devouring insects. While we have had great Rose development in one hundred years, it is also clear that quietly but insistently its enemies have been developing.

MR. JOSEPH CHEAL then proposed a vote of thanks to the President of the National Rose Society for presiding at the meeting, and

MR. JOHN GREEN seconded the vote of thanks, which was carried by acclamation.

The proceedings then terminated.

Descriptions of New Roses.

The Roses in this list bring the Official Catalogue up to date. While in most cases too new to be recommended from actual experience, they form a selection from the new varieties that seem to the Publications Committee worthy of notice and trial.

- Annie Crawford (H.T.), Hammond, 1914.—Pale silvery pink. Exhibition. Large flower. Strong grower. Gold Medal, N.R.S.
- Augustus Hartmann (H.T.), B. R. Cant & Sons, 1914.— Carmine red, flushed orange. Exhibition, garden. Gold Medal, N.R.S.
- Autumn Tints (Pernetiana), B. R. Cant & Sons, 1914.— Coppery red, shaded orange. Garden, bedding.
- Braiswick Charm (wich.), Frank Cant & Co., 1914.—Orange yellow, shading to white at outside of petals. Pillar, arch, pergola.
- Braiswick Gem (mult. scan.), Frank Cant & Co., 1912.— Nankeen yellow. Pillar, arch, pergola.
- Brilliant (H.T.), Hugh Dickson, 1914. Bright scarlet-crimson. Garden, bedding. Gold Medal, N.R.S.
- Candeur Lyonnaise (H.P.), Croibier, 1913.—White, sometimes shaded yellow. Exhibition.
- Chatillon Rambler (wich.), Nonin, 1913.—Pink, shaded flesh. Pillar, arch, pergola. A beautiful Rose.
- Cherry Page (H.T.), W. Easlea, 1914. Brilliant cerise pink. Garden, bedding. Unique colour.

- Chrissie MacKellar (H.T.), A. Dickson & Sons, 1913.— Carmine crimson, passing to orange pink. Garden. After the style of "Edu Meyer."
- Climbing Catherine Mermet (T.), Frank Cant & Co., 1912.— Climbing sport from old variety.
- Climbing Clara Watson (H.T.). Climbing sport from old variety.
- Climbing Mrs. W. H. Cutbush (mult. scan.), Paling.— Climbing sport from old variety.
- Climbing Madame Mélanie Soupert (H.T.), J. Burrell & Co., 1914.—Climbing sport from old variety.—Very good.
- Climbing Orleans Rose (mult. scan.), Levavasseur, 1913.— Climbing sport from old variety.
- Climbing Paul Lédé (H.T.), Stuart Low & Co., 1913.— Climbing sport from old variety.
- Climbing Souvenir de Pierre Notting (T.), Frank Cant & Co., 1912.—Climbing sport from old variety.
- Climbing Sunburst (H.T.), Stuart Low & Co., 1914. Climbing sport from old variety.
- Colleen (H.T.), McGredy & Son, 1914. Bright rose. Exhibition, garden. Gold Medal, N.R.S.
- Countess Clanwilliam (H.T.), Hugh Dickson, 1914.—Peach pink, edged cherry red. Garden. Gold Medal, N.R.S.
- C. W. Cowan (H.T.), A. Dickson & Sons, 1912.—Carmine red. Garden.
- Desiré Bergera (wich.), Barbier, 1909.
- Dinah (Hybrid Musk), Rev. J. H. Pemberton.
- Dolly Yarden (rug.), Paul & Son, 1914.—Apricot pink. Garden.

- Edgar M. Burnett (H.T.), McGredy & Son, 1914.—Flesh, tinted rose. Exhibition, bedding. After the style of "La France." Gold Medal, N.R.S.
- Eisenach (wich.), H. Kiese & Co., 1910.
- Ellen Poulsen (poly. pom.), Poulsen, 1911.—Cherry rose. Bedding.
- Entente Cordiale (H.T.), Pernet-Ducher, 1909. Cream. Garden, bedding.
- Ethel (wich.), Turner, 1912. Flesh pink. Pillar, arch, pergola. Semi-double. One of the best.
- Excellenz M. Schmidt Metzler (H.T.), Lambert, 1911.—
 White. Garden.
- Flora Mitten (Hybrid Musk). Clear pink. Pillar, arch, pergola. Large single flowers.
- Florence Forrester (H.T.), McGredy & Son, 1914.—White. Exhibition, garden. Gold Medal, N.R.S.
- Frau O. Piecq (H.T.), Jacobs, 1912.—Flesh. Garden.
- Grafin M. Henriette Chotek (mult.), Guillot, 1912.—Cream. Garden, bush.
- Grange Colombe (H.T.), Guillot, 1912.—Cream. Garden.
- H. Y. Machin (H.T.), A. Dickson & Sons, 1914.—Crimson. Exhibition. Gold Medal, N.R.S.
- Iona Herdman (H.T.), McGredy & Son, 1914.—Orange yellow. Garden. Gold Medal, N.R.S.
- Juwel (H.T.), Hinner, 1911.-White. Exhibition.
- Killarney Brilliant (H.T.), A. Dickson & Sons, 1914.—A deeper coloured sport of "Killarney."
- King of Siam (H.T.), Brauer, 1913.—Crimson. Garden.
- Klondyke (wich.), Paul & Son, 1911.—Lemon, orange centre.
 Pillar, arch, pergola. Good foliage.

- Lady de Bathe (H.T.), B. R. Cant & Sons, 1911.—Creamy white. Garden.
- Lady Downe (H.T.), W. Paul & Son, 1911.-Buff yellow. Garden.
- Lady Plymouth (T.), A. Dickson & Sons, 1914.—Cream. Exhibition, garden, pot. Gold Medal, N.R.S.
- Lady Reay (H.T.), B. R. Cant & Sons, 1911.—Deep pink.
 Garden.
- Le Ponceau (poly. pom.), Hemeray-Aubert, 1911.—Crimson. Garden, bedding.
- Louise Walter (mult. scan.)
- Louise Lilia (H.T.), Lambert, 1912.—Crimson. Garden.
- Madame Jules Bouche (H.T.), Croibier, 1911. White. Garden, pot.
- Madame Jules Gouchault (poly. pom.), Turbat, 1913.— Orange red. Garden, bedding.
- Majestic (H.T.), W. Paul & Son, 1914.—Carmine rose. Exhibition, garden. Gold Medal, N.R.S.
- Marcella (H.T.), W. Paul & Son, 1913. Salmon flesh. Garden.
- May Kenyon-Slaney (H.T.), A. Dickson & Sons, 1912.— Cream, flushed pink. Exhibition, garden. Large flower.
- Merveille des Rouges (poly. pom.), Dubreuil.—Crimson, white centre. Garden, bedding.
- Mevrouw Dora Van Tets (H.T.), Leenders, 1913.—Crimson. Garden, pot.
- Milady (H.T.), Pierson, 1914.—Bright crimson, "Richmond" type. Garden, pot.
- Mrs. A. Kingsmill (S.), Paul & Son, 1911.—Pale pink, soft rose reverse. Hybrid sinica Anemone. Garden.

- Mrs. A. Ricardo (H.T.), McGredy & Son, 1914.—Honey yellow. Silver-Gilt Medal, N.R.S.
- Mrs. Archie Gray (H.T.), Hugh Dickson, 1914.—Cream yellow. Garden. Gold Medal, N.R.S.
- Mrs. Campbell Hall (T.), A. Dickson & Sons, 1914.—Cream buff, suffused rose. Exhibition, garden, pot. Gold Medal, N.R.S.
- Mrs. C. C. Harrison (H.T.), A. Dickson & Sons, 1910.— Carmine crimson. Garden.
- Mrs. C. E. Pearson (Pernetiana), McGredy & Son, 1913.— Orange pink. Garden. Gold Medal, N.R.S.
- Mrs. C. Reed (H.T.), Elisha J. Hicks, 1914.—Cream, tinted peach. Garden. Silver-Gilt Medal, N.R.S.
- Mrs. C. Russell (H.T.), Waban Co., 1913.—Rosy carmine. Exhibition, pot.
- Mrs. Forde (H.T.), A. Dickson & Sons, 1913.—Carmine rose. Garden. Gold Medal, N.R.S.
- Mrs. G. Norwood (H.T.), Elisha J. Hicks, 1914.—Silvery pink. Robust. Exhibition. Large flower. Fragrant. Silver-Gilt Medal N.R.S.
- Mrs. Isabel Milner (H.T.), W. Paul & Son, 1907.— White, suffused pink. Garden.
- Mrs. James Lynas (H.T.), Hugh Dickson, 1914.—Pearl pink, rosy peach at edges. Vigorous. Exhibition, garden. Gold Medal N.R.S.
- Mrs. James White (H.T.), Hugh Dickson, 1912. Rose. Garden.
- Mrs. S. T. Wright (T.), A. Dickson & Sons, 1914.—Old gold, pink centre. Garden. Sport from "Harry Kirk."
- Mrs. T. Hillas (H.T.), Pernet-Ducher, 1914.—Chrome yellow. Garden.

- Mrs. W. H. Rowe (H.T.), McGredy & Son, 1912.—Sweet pea mauve. Exhibition.
- Mrs. Wemyss Quin (Pernetiana), A. Dickson & Sons, 1914.— Lemon chrome. Garden.
- Naarden (H.T.), Van Rossem, 1914.—Cream, centre salmon yellow. Garden.
- Neerwelt (H.T.), Verschusen, 1910.—Fiery red. Garden. Semi-climbing.
- Oracenta (H.T.), W. Easlea, 1913.—Shell pink. Garden.
- Papa Hemeray (C.), Hemeray Aubert, 1912. Scarlet crimson. Garden.
- Primerose (H.T.), Soupert et Notting, 1912. Apricot yellow. Garden.
- Radiance (H.T.), Cook, 1909.—Carmine, shaded salmon and coppery red. Garden.
- Red Letter Day (H.T.), A. Dickson & Sons, 1914.—Scarlet crimson. Garden. Single. Gold Medal, N.R.S.
- Red Admiral (H.T.), W. Paul & Son, 1913.—Cerise red. Garden, bedding.
- Rena Robbins (H.T.), E. G. Hill & Co., 1910.—White, orange centre. Garden.
- Robin Hood (H.T.).—Rosy scarlet. Exhibition.
- Schneezwerg (rug.), Lambert, 1911.—Pure white. Garden.
- Seagull (Hybrid Musk), Pritchard, 1907. Single white. Pillar, arch, pergola.
- Silver Moon (wich.), 1912.—Silvery white. Large.
- Snowdrift (mult. scan.), Smith, 1914.—Snow white. Pillar, arch, pergola. Large clusters.
- Source d'Or (wich.), Turbat, 1913.—Golden yellow. Pillar, arch, pergola.

- Souvenir de E. Guillard (H.T.), Chambard, 1913.— Saffron, shaded carmine. Garden. Fragrant.
- Susie (poly. pom.), W. Easlea, 1913. Salmon peach. Garden, bedding.
- Troubadour (wich.), Walsh, 1909.—Crimson. Pillar, arch, pergola. Glossy foliage.
- Yerna Mackay (H.T.), A. Dickson & Sons, 1912.—Lemon yellow. Garden.
- Viscount Carlow (H.T.), A. Dickson & Sons, 1910. Carmine pink. Garden.
- Waltham Scarlet (H.T.), W. Paul & Son, 1914. Scarlet-crimson. Garden, bedding.
- White Tausendschon (mult. scan.), W. Paul & Son, 1913.

 —Buds blush, flowers white. Best under glass.
- William Cooper (H.T.), Hugh Dickson, 1914.—Deep lake red. Garden. Silver-Gilt Medal, N.R.S.



The New Roses of 1914.

By H. E. MOLYNEUX, Hon. Vice-President N.R.S.

Awards of the National Rose Society's Medals.

The year 1914 marked a further stage in the difficult matter of the adjudication of these awards, and the fresh method, although not perfect, is a distinct improvement. was amended at the Summer Show and again at the Bath Show, certain points, while excellent in theory, not being found to work smoothly in practice. I understand it is proposed to still further endeavour to improve the scheme, probably on the lines of the reduction in the number of the judges, and making the time of judging coincident with the remainder of the Show. I think both these ideas are excellent and should be adopted. The latter will have the effect of preventing the often long wait of the public while the judging is going on and the former will also help towards expedition and, I think, a more satisfactory result. And if the best men can be persuaded to give up their possibly more enjoyable tasks in the ordinary competition much good should result.

THE SPRING SHOW,

Royal Horticultural Hall, Vincent Square.

By comparison with the first Spring Show of the Society (1913), the competitors this year were not so numerous nor, I think, the quality so high. At any rate this would appear to have been the opinion of the judges, as no gold medals were awarded, as against three the previous year. Certainly nothing quite so distinct as "Madame Edouard Herriot" or so good as "Mrs. Forde" put in an appearance, and only one Silver-Gilt Medal was awarded as against two. This was given to

"Princess Mary" (Elisha J. Hicks, of Twyford, Berks).—A single scarlet crimson Hybrid Tea of considerable merit. A good single Rose of this colour is much wanted, and I hope it has been found here. The plant is a good grower and the flower of large size, with prominent stamens, and said to be very free flowering this was not exactly apparent as shown, hence the withholding of the premier award subsequently given at Bath Show (which see).

The three Cards of Commendation fell to Messrs. Alex. Dickson & Sons, of Newtownards, for "Mrs. S. T. Wright," a very pretty decorative Tea, said to be a sport of "Harry Kirk"; Messrs. Hugh Dickson, of Belfast, for "Prince Charming," a Hybrid Tea of fine colour; and to Messrs. B. R. Cant & Sons, of Colchester, for "Autumn Tints," another H.T. that appeared to owe something of its colour to a Pernetiana cross, as it was not unlike "Madame Edouard Herriot."

THE NATIONAL SHOW.

The Royal Botanic Gardens.

Here the competition was much keener, and there was quite a good entry, notwithstanding the absence of Messrs. McGredy, of Portadown, whose Roses, owing to bad late spring frosts, were not sufficiently forward in time for the Show—as a rule one of the principal competitors.

One was glad to see an entry from Messrs. William Paul and Son, of Waltham Cross, and I trust it means that this old-established firm are once more entering the competitive area and supporting the National Rose Society with their exhibits.

Five Gold Medals and one Silver-Gilt Medal were awarded, and the Gold Medals were evenly distributed amongst five competitors—which is unusual—but is a sign that the competition is becoming keener.

"Margaret Dickson Hamill" (Messrs. Alexander Dickson and Sons, Newtownards). Hybrid Tea. This is a beautiful Rose of a fine golden yellow. The white "Rose of York" and the red "Rose of Lancaster" are known to all of us. Will this be the yellow "Rose of Ulster," I wonder? I should like to think so. The first "Margaret Dickson" won the Gold Medal in 1890, and was for years the most popular blush white Rose in our gardens. The second "Margaret Dickson" wins the Gold Medal in 1914, and, I hope, has an even more popular career in front of it. At any rate Rosarians all over the world who know the "Chatelaine of Mile Cross" will welcome and grow this Rose.

"Augustus Hartmann" (Messrs. B. R. Cant & Sons, of Colchester). Hybrid Tea. This Rose was very finely staged by the raisers, and was probably the sensation of the show, its fine glowing colour being particularly distinct.

It is a good grower, and carries its flowers on strong stems, and one would hazard that it might have "Captain Hayward" blood in its veins,

The raisers state it is not subject to mildew. It has frequently been awarded the Silver Medal for the best bloom in the Show, and a good flower is a welcome addition to any box. The colour is difficult to accurately describe—a heightened "G. C. Waud" gives one the idea perhaps, but it is undoubtedly very brilliant, and I only hope I shall be able to grow it within reasonable recognition of the flowers staged at the National.

"Mrs. Bertram J. Walker" (Messrs. Hugh Dickson, of Belfast). Hybrid Tea. I was much taken with this Rose—fragrant, and a fine bright colour—that one might describe as a deep cerise. Apparently a good grower and a good all-round variety.

"Majestic" (Messrs. Wm. Paul & Son, of Waltham Cross).—This is a fine, upstanding flower of some substance,

although not a great number of petals; fragrant, deep carmine Rose in colour, and a good grower.

These four Roses will probably all prove useful to exhibitors. The fifth Gold Medal was awarded to a Garden Rose of semi-climbing habit—

"Clytemnestra" (Rev. J. H. Pemberton, of Havering, Essex), H.T.—Described as a perpetual flowering semiclimber. The flowers have slightly twisted petals that somewhat spoilt its effectiveness some thought, others liked the quaintness of the blooms. The flowers are small and would appear to have some polyantha blood. I personally preferred one of this exhibitor's other Roses that was passed over.

The only Silver-Gilt Medal fell to Messrs. Alex. Dickson and Sons, of Newtownards, for "Mrs. Maud Dawson," a hybrid tea—a large flower of good substance, a dark scarlet in colour, that should prove very useful to the exhibitor.

The Cards of Commendation—or are they in future to be called Certificates of Merit?—were four in number, two falling to Messrs. Paul & Son, of Cheshunt, for two pretty decorative Roses, "Butterfly" and "Dolly Varden"; one to Messrs. S. Bide & Sons, of Farnham, for a very bright decorative Rose, "Mrs. Arthur Bide"; and the fourth to the Rev. J. H. Pemberton, of Havering, for "Pemberton's White Rambler," a free flowering rambler with multiflora parentage, with good trusses of small white flowers.

BATH SHOW.

Here two Gold Medals and one Silver-Gilt were awarded.

"Princess Mary," H.T. (E. J. Hicks, Twyford).—This was much better shown than it was at the Spring Show, and here secured the Gold Medal. If it is as free as I have good reason to believe it is, it will be a great acquisition to the single Roses and town gardens. The other Gold Medal fell to

"Annie Grawford," H.T. (W. R. Hammond, of Burgess Hill). I first made the acquaintance of this Rose in the garden of its raiser, Dr. Campbell Hall, of Monaghan, a good many years ago. His stock then consisted of, I think, five plants, and I was very fortunate to see a flower of it.

It struck me then as the biggest Rose I had come across, and I cannot now, some seven years later, call to mind a variety with larger flowers. Its colour is reminiscent of "Mrs. John Laing" at its best. It is a fine, vigorous grower, and one that comes remarkably evenly, split flowers being scarce. It was very freely and finely exhibited by the grower at Bath, over 50 flowers being staged. It is certain to add to the laurels of its veteran raiser.

"Josephine Nicholson," H.T. (G. Prince, Longworth, Berks).—This Rose secured the only Silver-Gilt Medal awarded. It is a very pretty sport from that good all-round Rose "Lady Ashtown," which it resembles save in its shade of colour, which is brighter and more decorative. It should prove very useful for house as well as garden decoration.



NATIONAL ROSE SOCIETY.

Thirty-seven Years of Continuous Progress.

By EDWARD MAWLEY, V.M.H., President N.R.s.

On my retirement at the end of last year from the Hon. Secretaryship of the National Rose Society, I thought it might be interesting to the Members to try and trace the principal influences which had brought about the present flourishing condition of that Society.

With this object in view the accompanying diagram was drawn. In the first place it shows the number of Members at the end of each year since 1886 to the present day, and at the same time the different places in which the Society's leading Exhibition has been held. Unfortunately the records from 1877 to 1885 are not available. But this I can say, that in each of those years there was some slight advance in the financial position of the Society upon that of the previous year. It also shows the years in which each of the Society's publications was first issued.

For the first three years of the Society's existence only one exhibition was held each year, but after that time, besides the leading show of the year in or near London, known as the Metropolitan Exhibition, there was either one or more Provincial exhibitions. Then in 1905 to these was added an Autumn Show of Roses in the Royal Horticultural Hall, Westminster, and eight years later a Spring Rose Show in the same hall.

As regards the increase in Membership due to those Exhibitions, it will be noticed that the first indication of any real upward movement worth mentioning after the establishment of the Society did not take place until 19c1, or 25 years after its establishment. In that year permission was obtained from the Master and Benchers of the Inner Temple for the Society to hold its now world renowned Metropolitian Exhibition in the Temple Gardens. This was a most important move, owing to the Temple Gardens having been made so well known to the then rapidly increasing flower loving public by the Royal Horticultural Society's magnificent exhibitions previously held there, and also owing to the Gardens themselves being situated in the heart of London.

A glance at the accompanying diagram will at once show how during the four years in question when the National Rose Society held its Metropolitan Show in those Gardens, the number of Members rose from less than 600 to over a thousand. In 1905, the Temple Gardens being no longer available, the leading Exhibition was transferred to the Royal Botanic Gardens in Regent's Park, where it has been successfully held ever since.

At first sight it might appear by this upward movement of the curve on the diagram as if the rapid increase in Membership after the Society's Show was removed from the Temple Gardens to the Royal Botanic Gardens was due to that removal, but this was far from being the case. For at that time those Gardens were to the majority of our Members an almost unknown region. In fact, we had then and for several years afterwards to issue the most detailed directions in order to assist our country Members in reaching the Show.

No, we must look elsewhere for the real explanation of the accelerated rate of increase in our Membership from that time to an entirely different cause, and that is to the helpful publications which the Society was then able to issue, having for the first time a little spare cash in hand, owing to the gate money taken at our four Exhibitions in the Temple Gardens, and to the Society having become more generally known.

The first of these publications was the "Official Catalogue of Roses," which was sent out in 1902. Then in 1905 came the "Handbook on Pruning Roses," followed in 1907 by the first "Rose Annual," and the "Enemies of the Rose" in 1908. From time to time new editions of those publications have been issued in order to keep them up to date, not only as to the instructions given, but also as to the Roses mentioned in them. For the Rose world is at the present time so rapidly on the move that even the Society's publications soon become more or less out of date.

Few except a Secretary, who like myself has as it were held the pulse of the Society in his hand throughout the whole period of its existence, can appreciate to the same extent the acceleration of that pulse that took place as one after another of those publications appeared. For almost every post since then has brought and still brings some enquiry having direct or indirect reference to those publications.

If we only think a moment, we must see that our Society is no longer, as it was for many years, almost entirely an exhibitors' Society, but one which sympathises with the requirements not only of exhibitors, but also with those of even the smallest grower of Roses in our own land and elsewhere.

There is every sign, which even the present disastrous war can only temporarily overshadow, that the love of Roses and Rose growing is and has been for some years rapidly on the increase in all English-speaking countries and elsewhere. Consequently a great future is open to our beloved National Rose Society, if we can only manage to gauge accurately and meet judiciously the requirements of the vast multitude of those who take special delight in the cultivation of our National Flower—the Rose.

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Diagram showing the number of Memb

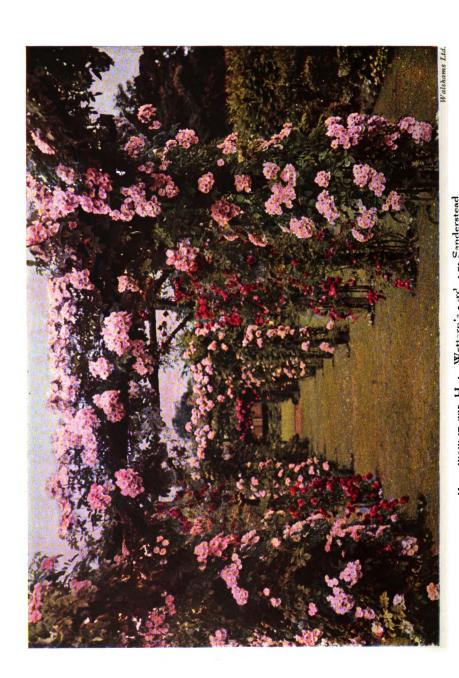
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EDWARD MAWLEY, President.



Our Colour Photographs.

By H. L. WETTERN.

The 1914 Spring Show of our Society being held on St. George's Day (April 23rd), the opportunity was taken of presenting to our gracious Patroness, H.M. Queen Alexandra, a basket of Roses, and our frontispiece is a coloured reproduction of same. The Roses used were Frau Karl Druschki, Richmond, Madame Abel Chatenay and Maréchal Niel—a beautiful collection of splendid blooms.

Mr. R. F. Felton, the well-known florist, of Hanover Square, carried out the work with his usual artistic skill, and the Society was honoured in due course with a letter from Sir Dighton Probyn, expressing her gracious Majesty's thanks.

One of the most striking features at the Royal Botanic Show was the dinner table decoration exhibited by Mrs. Bide and carried out entirely with the new Madame Edouard Herriot Rose. The centre bowl of this exhibit is the subject of one of our illustrations, and the whole effect of the decoration was both brilliant and unique. The reddish copper tint of the blooms contrasting vividly with the silver vases in which they were arranged made a wonderful picture.

In previous years the attentions of the colour photographer have been confined to the Rose shows, but a new departure was made by way of experiment in having a few autochromes taken in an amateur's Rose garden, and the Publications Committee decided upon the reproduction of two of these pictures. Both were taken in the writer's garden at Sanderstead, Surrey, where Roses seem to thrive in spite of the light chalk soil. The Rose walk was constructed in the autumn of 1907, so the plants represent seven years' growth.

The writer's greatest difficulty was in the selection of the Roses, the idea being to plant such varieties as would bloom together and make a simultaneous display of colour in this part of the garden.

The varieties finally selected were Blush Rambler and The Garland alternately on the eight upper and lower arches, with Crimson Rambler on the central double arch. The growth of the last-named variety did not by any means correspond with the others, so the wichuraiana Coronation has replaced it. The twenty larch poles are covered with a profuse mass of blooms to within a few inches of the ground from about June 20th until the first week in August, the crowning effect of full bloom being generally reached about July 7th.

The other illustration shows a double arch of American Pillar planted three years ago. The magnificent trusses of bloom and almost evergreen foliage are the two chief characteristics of this beautiful Rose, but it is sometimes inclined to grow "leggy."

Every year all these climbing Roses are untied, spread out on the ground, the old shoots hard pruned or cut out, and the previous year's strong rods left intact. To these operations can be ascribed the annual strong growth and the enormous trusses of bloom.

The Society has this year also taken in hand the production of coloured and uncoloured lantern slides for the purpose of illustrating lectures on Roses and Rose growing. Two sets of fifty slides each are now available for loan to members, and the regulations for their use, etc., are incorporated in the "Book of Arrangements" for 1915.

During the coming summer it is hoped that further colour illustrations of striking features in some of our Rose gardens may be secured, and the co-operation of members of the Society in the work will be welcomed.

INDEX.

	PAGE	
Alba	36	Disease, Roses and 99
Alexandra Day	128	Dolly Varden 38
Amateur, Experiences in 1914	·· 59	Easlea, Walter 88
Amelie Gravereaux	36	Empress Josephine 137
America	36	172:1 -2 -4
America's Help	129	Germanica 39
Annie Crawford	157	Glass, Roses under 102
Atropurpurea	36	Gordon, George 123 & 144
Audit of the Newer Roses	120	0 . 5 . 634
Augustus Hartmann	155	Carrier Tales
Autumn-flowering Roses	122	77 77 77
Awards of N.R.S. Medals in		TT-1t-
1914	153	77'11 1 1 1
Belle Poitevine	36	TT:maslammais
Bienvetu	36	Himalayensis 39
Black Spot and Mildew	105	Hockliffe, E. and M 11
Blanc double de Coubert	37	Holland, E. J 102 & 140
Blooming, Dates of	55	Hybrid Perpetuals 112 & 133
Browning, Mrs. E. B	10	Hybrid Teas 112 & 134
Calocarpa	37	Illustrations, List of 8
Cant, C. E	· 49	Increase of Varieties 132
Cant, Frank	51 & 142	Josephine Nicholson 157
Carmen	37	Kamtchatica 39
Cheal, J	145	La Melusine 45
Chédane Guinoisseau		Lamplough, Dr. Charles 65
China, Damask and Boursault		Le Cid 40
Roses	131	Love of the Rose 127
Cibles	45	Madeline Filot 42
Clytemnestra	156	Majestic 156
Colour Photographs	161	Manuring Roses, Symposium on 62
Comte D'Epremesnil	37	Margaret Dickson Hamill 155
Conrad F. Meyer	38	Mawley, E 48, 110, 143 & 158
Cook, T. N	105	Mercedes 42
Cowley, Walter	55	Mildew, Prevention of 102
Cut Roses, How to	16	Mme. Alvarez del Campo 40
Cut Roses, Lasting Qualities		Mme. Ancelot 40
Dallimore, W	27 & 73	Mme. Ballu 40
Paniel Lesueur	38	Mme. Charles F. Worth 40
	31 & 129	Mme. Georges Bruant 41
Darlington, Mrs. H. R	16	Mme. Henri Gravereaux 41
Dates of first flowering of	10	Mme. Julien Potin 41
Exhibition Roses	6o	Mme. Laborie 41
Decorative Roses	119	Mme. Lucien Willeminot 41
Decoration, Roses for	24	M . D/ / O
Delicata	38	Maria Winas
Dickson, A	48	Mala and M. P.
•		Molyneux, H. E

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INDEX-continued.

	F	AGE			PAGE
Morgan, E. F	••	97		• •	43
Mrs. Anthony Waterer	••	42	Rose Conference	• •	126
Mrs. Bertram J. Walker	• •	155	Roseraie de l'Hay	• •	43
"Mrs. Edward Mawley,"			Rubra	• •	43
Cultivation of	• •	48	Rugosa Roses	• •	31
Mrs. Maud Dawson	••	156	Rugosa Roses, History of	• •	33
Multiflora Group	••	135	Rugosa Roses, Selection of	• •	35
Municipal Rose Gardens	••	88	Rugosa × acicularis	• •	45
National Rose Society	••	158	,, × Fedschenkoana	• •	45
New Century	••	45	$,, \times$ foliolosa	• •	45
New Roses, Descriptions of	• •	146	,, × humilis		45
New Roses from America		141	,, × lutea	••	45
New Roses of 1914		153	" × multiflora	••	46
Newer H.P.'s and H.T.'s		115	,, x rubiginosa	• •	46
Newer Teas		118	Sawday, G. C	••	70
Nicholson, G. O		5 9	Schneelicht		45
Noisettes		139	Schneezwerg	••	43
Notices to Members for 1915		2	Shackle, Rev. J. B	49	& 75
Nova Zembla	••	42	Shea, C. E		126
One Hundred Years of Peace		127	Slaughter, F	51	& 67
Orpen, O. G	• • •	62	Souvenir de Christophe Coche	et	44
Page, Mrs. Courtney		26	,, ,, Philemon ,,		44
6 /	••	21	,, ,, Pierre Leperdreu	ıx	44
Paul, George Laing	••		Voddo		44
Pemberton, Rev. J. H	••	137	Special Audit of the Newer		• •
Pernet Group	••	136	H.P.'s & H.T.'s		12[
Preface	••	6	Special Audit of the Newer		
Prince, A. E	••	52	Tea Roses	• •	. 121
Princess Mary	154 8		Special Audit of the Newer		
Prior, W. D	. ••	50	Decorative Roses	• •	121
Public Parks, Rose Gardens	in	9 7	Speight, Gulliver	••	58
Real Advance	••	133	Table Decoration with Roses	• ••	26
Regeliana	••	43	Table of Contents	••	7
Repens alba	••	43	Tamogled	• •	45
Repens rosea	• •	43	Taylor, G. M		99
R. Giraldii	••	2 8	Teas and Noisettes		116
R. Hugonis		2 8	Theophrastus		129
R. Moyesii		28	Thusnelda		44
R. Muscosa Japonica		46	Tinted Venus (?)		44
R. Nipponensis	28	& 4 6	"Torbay"		77
R. Omeiensis		29	War Time, Roses in		11
R. sericea var. pteracantha		20	Western Australia, Rose Gro	wing	in 53
R. sertata		29	Wettern, H. L		& 161
R. setipoda		29	Wichuraiana and Pernetiana		
R. Soulieana		30	Williams, Dr. A. H		
R. Willmottiae	•••	30	Williamson, Mrs. C. C		. 24
Rosa, New Species of	• • •	_	Windsor, J. C		
		27	Woosnam, R	• • • • • • • • • • • • • • • • • • • •	_
Rose Apples	••	43		T	
Rose Analysis, 1909-1914	••	110	Digitized by GOOg	, IC	

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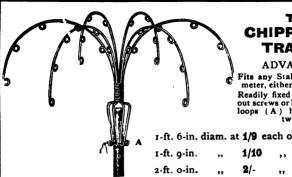
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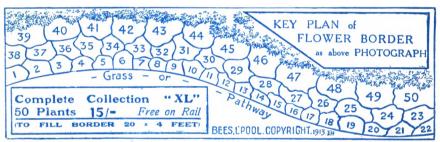
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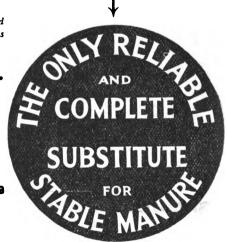
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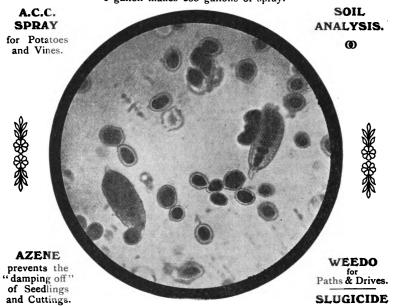
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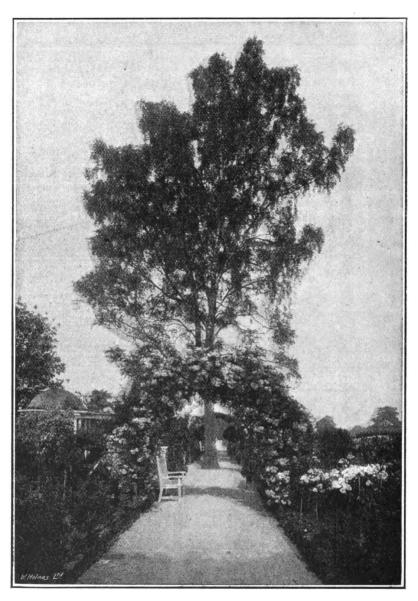
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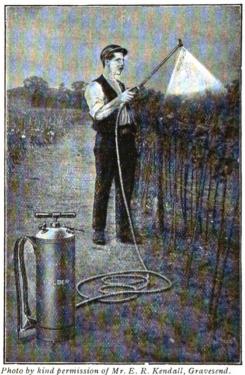
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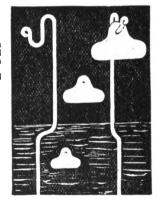
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